

Foodborne Pathogen Test Kits Validated by Independent Organizations

FSIS is making available a list of test kits that have been validated for detection of relevant foodborne pathogens (i.e., *Salmonella*, *Campylobacter*, *Listeria* spp. including *L. monocytogenes*, *E. coli* O157:H7 and non-O157 STEC). The list is intended to be informational and is not an endorsement or approval of any specific test kit, regardless of its inclusion in the list.

FSIS does not specifically endorse any of the mentioned test kits or products and acknowledges that equivalent test kits or products may be available for laboratory use. Likewise, FSIS does not require the use of any specific test kit, including those incorporated into FSIS's Microbiology Laboratory Guidebook methods. Instead, establishments and laboratories should choose test kits that are:

1) Validated for testing relevant foods by a:

- a) Recognized independent body (i.e., AOAC, AFNOR, MicroVal, NordVal),
- b) U.S. regulatory body (i.e., FSIS MLG or FDA BAM), or
- c) International Organization for Standardization (ISO) process

2) In addition, the validated method should be:

- a) Fit for the intended purpose and application (e.g., validated for the appropriate matrix and sample size to detect the appropriate foodborne pathogen), and
- b) Performed per the conditions of the validated protocol by a laboratory that assures the quality of the analytical results.

The table below contains a list of foodborne pathogen test kits that are validated by recognized independent organizations (i.e., AOAC, AFNOR, MicroVal, NordVal) and therefore meet criterion 1a above. However, the test kits in this list are not necessarily equivalent or appropriate for all testing applications.

FSIS intends to update validated test kit lists on a quarterly basis.

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S001a	3M™ Molecular Detection Assay <i>Salmonella</i>	<i>Salmonella</i> spp.	3M Health Care	AFNOR # 3M 01/11 - 11/12	All human food products (except spices, aromatic herbs, instant coffees and teas, bouillon cubes/concentrates, milk powders and cocoa powders) and environmental samples (except primary production stage environment)	25g
S001b	3M™ Molecular Detection Assay	<i>Salmonella</i> spp.	3M Food Safety	AOAC-PTM # 031208	Pasteurized liquid whole egg, raw ground beef, cooked breaded chicken, raw shrimp, bagged spinach, wet pet food (375g)	25g except where noted in "Validated Matrices"
S001c	3M™ Molecular Detection Assay (MDA) <i>Salmonella</i> Method	<i>Salmonella</i> spp.	3M Food Safety	AOAC-OMA # 2013.09	Raw ground beef (25g, 325g, 375g), cooked breaded chicken (325g), liquid egg (100g), shrimp, fresh spinach, and wet dog food (375g), raw ground chicken (25g, 325g), pasteurized american cheese, peanut butter, dry dog food (25g, 375g), sprout irrigation water (375g), chicken carcass rinse (30ml), chicken carcass sponge, sealed/glazed ceramic tile, concrete,	25g except where noted in "Validated Matrices"
S002a	3M™ TECRA™ <i>Salmonella</i> Visual Immunoassay	<i>Salmonella</i> spp.	3M Microbiology	AOAC-OMA # 989.14	All foods	25g
S002b	3M™ TECRA™ <i>Salmonella</i> Visual Immunoassay	<i>Salmonella</i> spp.	3M Microbiology	AOAC-OMA # 998.09	All foods	25g
S005a	ANSR™ for <i>Salmonella</i>	<i>Salmonella enterica</i> and <i>Salmonella bongori</i>	Neogen Corporation	AOAC-PTM # 061203	Raw ground beef, hot dogs (25g, 325g), chicken carcass rinse (30mL), raw ground turkey, oat cereal, surfaces (stainless steel, plastic, sealed concrete, ceramic tile, rubber)	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S005b	ANSR™ for <i>Salmonella</i>	<i>Salmonella enterica</i>	Neogen Corporation	AFNOR # NEO 35/02 - 05/13	Meat products, dairy products, seafood and vegetables	25g
S006a	Assurance GDS® <i>Salmonella</i>	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AFNOR # TRA 02/12 - 01/09	All human foodstuffs, animal feed and environmental samples	25g
S006b	Assurance GDS® <i>Salmonella</i>	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 2009.03	Meats, poultry, poultry carcass rinse, seafood, dairy products, egg, pasta, peanut butter, fruits and vegetables, spices (curry powder, chili powder, and cumin powder), and environmental surfaces	25g
S006c	Assurance GDS™ <i>Salmonella</i>	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-PTM # 050602	Raw beef, raw pork, ground turkey, chicken rinse, raw shrimp, nonfat dry milk, egg, and environmental surfaces (stainless steel rubber concrete)	25g
S007	Assurance Gold EIA <i>Salmonella</i>	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 999.08	All foods	25g
S008	Assurance® <i>Salmonella</i> Enzyme Immunoassay (EIA) Test Kit	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 992.11	All foods	25g
S009	Atlas™ <i>Salmonella</i> Detection Assay	<i>Salmonella enterica</i>	Roka Biosciences, Inc.	AOAC-PTM # 031201	Fresh raw ground beef (375g), frozen raw ground beef (375g), chicken carcass rinse, raw ground chicken, cooked deli turkey (325g), cooked deli chicken (325g), pasteurized dried whole egg (100g)), raw cod, creamy non-organic peanut butter, romaine lettuce (375g), tomatoes, instant nonfat dry milk, string cheese (mozzarella), milk chocolate, cocoa powder (375g), raw cookie dough, dry pet food, dry pasta, shell eggs, nacho cheese seasoning, black pepper, soy flour, environmental surfaces (stainless steel, plastic, sealed	25g except where noted in "Validated Matrices"
S010a	BAX® <i>Salmonella</i> PCR (BAX® Classic and BAX® Q7) BAX® System with Automated Detection PCR Assay for Screening <i>Salmonella</i>	<i>Salmonella</i> spp.	Oxoid, Thermo Fisher Scientific	NordVal # 030	Dairy products, meat, fish, vegetables, pastries, egg products, ready to eat meals, animal feed, and environmental samples	25g
S010b	BAX® System PCR Assay for <i>Salmonella</i>	<i>Salmonella</i> spp.	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 100201	Milk (2%), custard, nonfat dry milk, liquid egg, chipped ham, cooked chicken, hot dogs, ground beef, cooked fish, prawns, frozen peas, orange juice, peanut butter, alfalfa sprouts, black pepper, dry pet food, chilled ready-meal, chocolate, elbow macaroni, pizza dough, isolated soy protein	25g
S010c	BAX® System PCR Assay <i>Salmonella</i> spp. (automated)	<i>Salmonella</i> spp.	DuPont Qualicon	AFNOR # QUA 18/03 - 11/02	All human food products, animal feed and environmental samples (excluding environment of primary production stage)	25g
S010d	BAX® System <i>Salmonella</i>	<i>Salmonella</i> spp.	DuPont Qualicon (DuPont Nutrition & Health Diagnostics)	AOAC-OMA # 2003.09	Frankfurters, raw ground beef, raw ground chicken, mozzarella cheese, raw frozen tilapia fish, and orange juice	25g
S011	BBL™ CHROMagar™ <i>Salmonella</i>	<i>Salmonella</i> spp.	Becton Dickinson and Company	AOAC-PTM # 020502	Shell eggs, raw chicken, raw ground beef, raw fish, lettuce	N/A
S012	BioControl 1-2 TEST	Motile <i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 989.13	All foods	25g
S014	Check&Trace <i>Salmonella</i> (previously marketed as PermiTest <i>Salmonella</i>)	<i>Salmonella</i> spp.	Check-Points	AOAC-PTM # 121001	Pure cultures	N/A

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#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S015	Colorimetric GENE-TRAK <i>Salmonella</i> Assay	<i>Salmonella</i> spp.	GENE-TRAK Systems/Neogen Corp.	AOAC-OMA # 990.13	All foods	25g
S016	foodproof® <i>Enterobacteriaceae</i> plus <i>E. sakazakii</i> combined with foodproof® <i>Salmonella</i> Detection Kit	<i>Enterobacteriaceae</i> , <i>Salmonella</i> spp.	BIOTECON Diagnostics GmbH	MicroVal # 2011-LR39	Powdered infant formula, probiotic culture powders, ingredients	Up to 100g
S017a	foodproof® <i>Salmonella</i> Detection Kit, Hybridization Probes and foodproof® <i>Salmonella</i> Detection Kit, 5' Nuclease with foodproof® ShortPrep I Kit	<i>Salmonella</i> spp.	BIOTECON Diagnostics GmbH	NordVal # 023	Foods, feeds and environmental samples (100cm ²)	25g except where noted in "Validated Matrices"
S017b	foodproof® <i>Salmonella</i> Detection Kit, Hybridization Probes for <i>Salmonella</i> spp. and foodproof® <i>Salmonella</i> Detection Kit, 5' Nuclease for <i>Salmonella</i> spp. in combination with foodproof® ShortPrep I Kit or StarPrep One Kit	<i>Salmonella</i> spp.	BIOTECON Diagnostics GmbH	AOAC-PTM # 120301	Milk powder, ice cream, egg powder, chicken breast, minced meat, sliced sausage, sausage, smoked fish, watermelon, sliced cabbage, coconut, white pepper, cumin, wet pet food, dry pet food, dough, food dye, milk chocolate, cocoa powder, pasta, custard, chocolate ice cream, raw ground beef, mayonnaise, primary production samples (boot socks with	25g
S018	GeneDisc® Plate Pathogenic <i>E. coli</i> O157 & <i>Salmonella</i> spp.	<i>E. coli</i> O157 & <i>Salmonella</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 021104	Fresh raw ground beef, fresh raw beef trim	25g, 375g
S019	GeneDisc STEC & <i>Salmonella</i> spp.	Shigatoxigenic <i>E. coli</i> & <i>Salmonella</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 021105	Raw ground beef and raw beef trim	25g, 375g
S020a	GeneDisc® <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	Pall GeneDisc Technologies	AFNOR # GEN 25/05 -11/08	All human food products and animal feeding stuffs	25g
S020b	GeneDisc® Plate <i>Salmonella</i>	<i>Salmonella</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 021101	Raw ground beef (25g, 375g) and raw beef trim (25g, 375g), raw chicken breast (25g, 375g), raw ground turkey, (25g, 375g), chicken carcass rinsates (30ml), raw de-headed shrimp, fresh cut cantaloupe, whole cantaloupe, bagged ready to eat mixed lettuce, creamy non-organic peanut butter, raw alfalfa sprouts, instant nonfat dry milk, cheddar cheese, vanilla ice cream, milk chocolate, dry dog food (25g,375g), black pepper, shell eggs, spent sprout irrigation water (375g), stainless steel,	25g except where noted in "Validated Matrices"
S021a	GeneQuence® <i>Salmonella</i>	<i>Salmonella</i> spp.	Neogen Corporation	AOAC-OMA # 2007.02	Raw turkey, dried, liquid and liquid frozen pasteurized eggs, milk chocolate, and dry pet food	See Manufacturer's guidance
S021b	GeneQuence® <i>Salmonella</i>	<i>Salmonella</i> spp.	Neogen Corporation	AOAC-PTM # 030201	Dried whole egg, nonfat dry milk, cheese powder, raw pooled shell egg, raw ground pork, beef franks, raw ground turkey, raw ground chicken, raw fish fillet, surimi, dried fruit, fresh mushrooms, frozen fruit, black pepper, dry pet food, dry cake mix, shelled walnuts, semi-sweet chocolate, refrigerated cookie dough, soy flour,	25g

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#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S025	IEH <i>E. coli</i> O157, Stx-producing <i>E. coli</i> (STEC) with Intimin and <i>Salmonella</i> Test System	<i>E. coli</i> O157, Stx-producing <i>E. coli</i> (STEC) with intimin & <i>Salmonella</i> ** <i>E. coli</i> O26, O45, O103, O111, O121 & O145	IEH Laboratories & Consulting Group	AOAC-PTM # 100701	Raw ground beef (25g, 375g), raw beef trim (25g, 375g), raw poultry, RTE turkey (omitted for STEC) & mixed leafy greens	25g except where noted in "Validated Matrices"
S026	InstantLabs® <i>Salmonella</i> Species Food Safety Kit	<i>Salmonella</i> spp.	InstantLabs Medical Diagnostics Corporation	AOAC-PTM # 031202	Raw ground beef (375g), raw chicken breast, raw ground chicken, lettuce, rolled oats (750g), oat flour (750g), wheat flour (750g)	25g except where noted in "Validated Matrices"
S027a	iQ-Check™ <i>Salmonella</i> II Kit	<i>Salmonella</i> spp.	Bio-Rad Laboratories	AFNOR # BRD 07/06 - 07/04	All human and animal food products, production environment samples, and animal faeces and environmental samples from the primary production stage	25g
S027b	iQ-Check™ <i>Salmonella</i> II Kit	<i>Salmonella</i> spp.	Bio-Rad Laboratories	AOAC-PTM # 010803	Whole eggs, raw beef, raw ground chicken (25g and 375g), cantaloupe, peanut butter, raw pork, fresh spinach, ceramic, concrete, plastic, stainless steel, dry dog food (25g and 375g), wet cat food, and ready to eat deli ham (375g) milk chocolate (375g), raw milk cheese (375g), and 30ml carcass	25g except where noted in "Validated Matrices"
S027c	iQ-Check™ <i>Salmonella</i> II Kit	<i>Salmonella</i> spp.	Bio-Rad Laboratories	NordVal # 038	Meat products, dairy products, fish-based and vegetable products, egg products, animal feed, and environmental samples	25g
S027d	iQ-Check™ <i>S. Enteritidis</i>	<i>S. Enteritidis</i>	Bio-Rad Laboratories	AOAC-PTM # 081903	Raw chicken breast with skin, raw chicken breast without skin, raw chicken breast without skin containing 2% w/w salt, raw chicken thigh with skin, raw chicken thigh without skin	25g
S027e	iQ-Check™ <i>S. Typhimurium</i>	<i>S. Typhimurium</i>	Bio-Rad Laboratories	AOAC-PTM # 081904	Raw chicken breast with skin, raw chicken breast without skin, raw chicken breast without skin containing 2% w/w salt, raw chicken thigh with skin, raw chicken thigh without skin	25g
S028	IRIS <i>Salmonella</i> ®	<i>Salmonella</i> spp.	SOLABIA SAS	AFNOR # BKR 23/07 - 10/11	All human food products, animal feeding stuffs and production environment samples (except primary production stage environment)	25g
S029	LOCATE® <i>Salmonella</i> Assay Kit	<i>Salmonella</i> spp.	Rhone-Poulenc	AOAC-OMA # 997.16	All foods	25g
S031	Microgen GNA ID	<i>Salmonella</i> spp. & <i>E. coli</i>	Microgen Bioproducts Limited	AOAC-PTM # 061101	Pure culture	N/A
S032a	MicroSEQ® <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	Life Technologies Corporation, Part of Thermo Fisher Scientific	AFNOR # ABI 29/02 - 09/10	All human food products (including meat products) and animal feeding stuffs, animal feces, and environmental samples from primary production stage	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S032b	MicroSEQ® <i>Salmonella</i> spp. Detection Kit	<i>Salmonella</i> spp.	Thermo Fisher Scientific	AOAC-PTM # 031001	Raw ground beef, raw chicken wings, raw shrimp, cantaloupe, brie, dry infant formula, chocolate, dry pet food, shell eggs, black pepper, peanut butter (25 g); stainless steel, sealed concrete, plastic, ceramic tile, rubber; 10-pooling <i>Salmonella</i> spp. for fresh diced tomatoes, chocolate, and deli ham; dry pet food (375 g)	25g except where noted in "Validated Matrices"
S035	Pathatrix Pooling System for <i>Salmonella</i> species	<i>Salmonella</i> spp.	Life Technologies (Part of Thermo Fisher Scientific)	AOAC-PTM # 090203C	Raw ground chicken, pasteurized liquid egg, raw ground beef, cooked sliced ham, milk powder, orange juice, black ground pepper, chocolate, soft cheese, produce, raw fish, lasagna (ready meal), cooked ham, raw whole egg, chocolate, milk powder, frozen brownie	25g
S036	Pathotec Cytochrome Oxidase Test MICRO-ID® Identification Kit	<i>Salmonella</i> spp., <i>E. coli</i> , and other Enterobacteriaceae	Remel	AOAC-OMA # 989.12	N/A	N/A
S037	PDX-SIB	<i>Salmonella</i> spp.	Paradigm Diagnostics, Inc.	AOAC-PTM # 071102	Environmental surfaces (Stainless steel, plastic, ceramic tile & sealed	N/A
S038a	RAPID <i>Salmonella</i>	<i>Salmonella</i> spp.	Bio-Rad Laboratories	AFNOR # BRD 07/11 - 12/05	All human and animal food products and environmental samples (excluding those from primary production environment)	25g
S038b	RAPID <i>Salmonella</i>	<i>Salmonella</i> spp.	Bio-Rad Laboratories	AOAC-PTM # 050701	Raw chicken breast, eggs, cantaloupe, and peanut butter	25g
S038c	RAPID <i>Salmonella</i>	<i>Salmonella</i> spp.	Bio-Rad Laboratories	NordVal # 032	Foods, animal feeds, and environmental samples	25g
S039b	RapidChek® SELECT™ <i>Salmonella</i> Test	<i>Salmonella</i> spp.	Romer Labs Technology, Inc.	AOAC-PTM # 080601	Liquid eggs, raw ground beef, raw ground chicken, chicken carcass rinsates (30ml), sliced cooked turkey, and environmental surfaces painted concrete (1x1 in), plastic (4x4 in), rubber (4x4 in), stainless steel 4x4 in, 12x12 in, ground beef (375g)	25g except where noted in "Validated Matrices"
S040	RapidChek® SELECT™ <i>Salmonella</i> Enteritidis Test System & RapidChek CONFIRM <i>Salmonella</i> Enteritidis Immunomagnetic Separation (IMS) Kit	<i>Salmonella</i> Enteritidis and other D1 serovars	Romer Labs, Inc.	AOAC-PTM # 111002	Poultry house environmental drag swabs, egg pools, chicken carcass rinsates	N/A
S043a	Reveal® <i>Salmonella</i> 2.0	<i>Salmonella</i> spp.	Neogen Corporation	AFNOR # NEO 35/01 - 10/11	Meat products, dairy products (except milk powders, egg products, seafood and vegetables (except dehydrated products)	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S043b	Reveal® 2.0 <i>Salmonella</i>	<i>Salmonella enterica</i> of serogroups A-E	Neogen Corporation	AOAC-PTM # 960801	Powdered milk, ice cream, raw ground beef, raw ground chicken, raw ground pork, raw ground sausage, raw ground turkey, cooked chicken, hot dogs, ready-to-eat meal product, chicken carcass rinse, beef skin, pork skin, picked crab meat, raw shrimp, cantaloupe, fresh spinach, peanut butter, liquid eggs, frozen whole eggs, dry pet food, soybean meal, poultry feed, sprout irrigation water, environmental surfaces (stainless steel)	25g
S044a	RIDASCREEN® <i>Salmonella</i>	<i>Salmonella</i> spp.	R-Biopharm AG	AFNOR # RBP 31/01 - 06/08	All human food products, animal feed and environmental samples (except samples of primary production)	25g
S045	<i>Salmonella</i> detection method by real-time PCR	<i>Salmonella</i> spp.	Eurofins	NordVal # 041	Raw meat and swabs from beef and pork carcasses	25g
S048	<i>Salmonella</i> PRECIS™	<i>Salmonella</i> spp.	OXOID Ltd	AFNOR # UNI 03/06 - 12/07	All human and animal food products and environmental samples (excluding breeding samples)	25g
S049	<i>Salmonella</i> Rapid Culture Method using ONE Broth <i>Salmonella</i> & Brilliance™ <i>Salmonella</i>	<i>Salmonella</i> spp.	Thermo Fisher Scientific	AOAC-PTM # 120802	Ground beef, ground chicken, lettuce, shrimp & shell eggs	25g
S050	<i>Salmonella</i> -Tek ELISA Test System	<i>Salmonella</i> spp.	Organon Teknika Corp.	AOAC-OMA # 993.08	All foods	25g
S051	<i>Salmonella</i> -Tek Screen Kit	<i>Salmonella</i> spp.	Organon Teknika Corp.	AOAC-OMA # 986.35	All foods	25g
S052	<i>Salmonella</i> -Tek Screen Kit	<i>Salmonella</i> spp.	Organon Teknika Corp.	AOAC-OMA # 987.11	All foods other than raw foods or foods with a high microbial load	25g
S054	SESAME <i>Salmonella</i> Test	<i>Salmonella</i> spp.	SOLABIA SAS	AFNOR # BKR 23/04 - 12/07	All human and animal food products and environmental samples (with the exception of environment of primary production stage)	25g
S055	Simple Method for <i>Salmonella</i> (SMS™)	<i>Salmonella</i> spp.	bioMérieux	AFNOR # AES 10/04 - 05/04	All food products, animal feed and environmental samples (excluding rearing environment)	25g
S056	Singlepath® <i>Salmonella</i>	<i>Salmonella</i> spp.	Merck KGaA	AOAC-PTM # 060401	Dried skimmed milk, black pepper, dry pet food, desiccated coconut, cooked peeled frozen prawns, raw ground beef, raw ground turkey	25g
S057b	SureFast <i>Salmonella</i> PLUS	<i>Salmonella</i> spp.	CONGEN Biotechnologie GmbH	AOAC-PTM # 041103	Salami, pork minced meat, bacon, fresh ground chicken, fresh chicken carcass, frozen marinated chicken filets, semi-skim milk powder, raw goat milk cheese, chocolate ice cream, salad with mayonnaise, paella, cream based pastry, dehydrated poultry proteins, wheat based flour, pet food pellets	25g
S060a	TRANSIA® PLATE <i>Salmonella</i> Gold	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AFNOR # TRA 02/08 - 03/01	Food, animal feeding stuffs and environmental samples (excluding breeding samples)	25g
S060b	TRANSIA® PLATE <i>Salmonella</i> Gold	<i>Salmonella</i> spp.	BioControl Systems, Inc.	NordVal # 001	Meat products, dairy products, seafood products, vegetables and environmental samples	25g

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#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S060c	Transia® Plate <i>Salmonella</i> Gold	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-PTM # 010602	Cooked chicken, raw milk, cantaloupe, sausages, raw shrimps, yogurt, mayonnaise, shell eggs, frozen berries, currants, bean sprouts, raw ground beef, smoked fish (trout), fresh pasta, milk chocolate, ground black pepper, cake mix, dry milk-based infant formula, dry cat food, raw ground turkey, brie cheese	25g
S062a	VIDAS® Easy <i>Salmonella</i>	<i>Salmonella</i> spp.	bioMérieux, sa	AFNOR # BIO 12/16 - 09/05	All human and animal food products and environmental samples (except stock farming environment)	25g
S062b	VIDAS® <i>Salmonella</i> (VIDAS SLM) Dual selective enrichment	<i>Salmonella</i> spp.	bioMérieux, sa	AFNOR # BIO 12/01 - 04/94	All human food products and pet food	25g
S062c	VIDAS® <i>Salmonella</i> (VIDAS SLM) Single selective enrichment	<i>Salmonella</i> spp.	bioMérieux, sa	AFNOR # BIO 12/10 - 09/02	All human food products and pet food	25g
S062d	VIDAS® <i>Salmonella</i> (SLM) Assay Kit	<i>Salmonella</i> spp.	bioMérieux, Inc.	AOAC-OMA # 2004.03	Foods	25g
S062e	VIDAS® <i>Salmonella</i> (SLM) Assay	<i>Salmonella</i> spp.	bioMérieux Vitek, Inc.	AOAC-OMA # 996.08	All foods	25g
S062f	VIDAS® <i>Salmonella</i> (SLM) Assay method Easy SLM with ChromID™ <i>Salmonella</i> (SM2) Agar	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-PTM # 020901	Turkey, roast beef, raw ground pork, pork sausage, raw chicken breast, raw peeled shrimp, raw cod, cantaloupe, ground black pepper, bagged spinach, pecans, peanut butter, ice cream, liquid eggs, whole milk, non-fat dry milk, orange juice, dry pasta, cake mix, dry pet food, spent irrigation water, dog food, cat food, dark chocolate, rubber (4x4"), concrete (1x1"), ceramic (1x1"),	Sample preparation and enrichment as per FSIS MLG Ch. 4 for meat/poultry/egg and environmental samples
S062g	VIDAS® <i>Salmonella</i> (SLM) Easy <i>Salmonella</i>	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-OMA # 2011.03	Liquid egg, vanilla ice cream, spinach (frozen and fresh), raw shrimp, peanut butter, deli turkey, roast beef, raw ground pork, turkey, pork sausage, raw chicken breast, dry pet food, moist pet food, whole milk, raw cod, spent irrigation water, pecans, dry pasta, cake mix, ground black pepper, non-fat dry milk, dried egg yolk, dark chocolate, cantaloupe, and orange juice	Sample preparation and enrichment as per FSIS MLG Ch. 4 or FDA BAM Ch. 5
S063a	VIDAS® Immuno-Concentration <i>Salmonella</i> (ICS) Kit	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-OMA # 2001.07	All foods	25g
S063b	VIDAS® Immuno-Concentration <i>Salmonella</i> (ICS) Kit and Selective Plate (HE BS XLD) Screening	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-OMA # 2001.08	All foods	25g
S063c	VIDAS® Immuno-Concentration <i>Salmonella</i> (ICS) Kit and Selective Plate (HE BS XLD) Screening <i>Salmonella</i> (SLM) Enzyme-Linked Immunofluorescent Assay (ELFA)	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-OMA # 2001.09	All foods	25g
S065a	VIDAS® Up <i>Salmonella</i>	<i>Salmonella</i> spp.	bioMérieux, sa	AFNOR # BIO 12/32 - 10/11	All human food products (except raw milk cheese), animal feeding stuffs and production environmental samples	25g
S065b	VIDAS® UP <i>Salmonella</i> (SPT)	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-PTM # 071101	Raw ground beef (25g, 375g, 675g), deli roast beef, chicken carcass rinsate,	25g except where noted in

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#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S065c	VIDAS® UP <i>Salmonella</i> (SPT)	<i>Salmonella</i> spp.	bioMérieux, sa	AOAC-OMA # 2013.01	Raw ground beef (25 and 375 g), processed American cheese (25 g), deli roast beef (25 g), liquid egg (25 g), peanut butter (25 g), vanilla ice cream (25 g), cooked shrimp (25 g), raw cod (25 g), bagged lettuce (25 and 375 g), dark chocolate (375 g), powdered eggs (25 g), instant nonfat dry milk (25 and 375 g), ground black pepper (25 g), dry dog food (375 g), raw ground turkey (375 g), almonds (375 g), chicken carcass rinsates (30 mL), and stainless steel, plastic, and ceramic	25g except where noted in "Validated Matrices"
S066	VIP Gold for <i>Salmonella</i> Assay	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 999.09	All foods	25g
S067	Vitek GNI+ Screening System	<i>Salmonella</i> spp. and other <i>Enterobacteriaceae</i>	bioMérieux, sa	AOAC-OMA # 991.13	N/A	N/A
S068	Vitek® 2 Gram-Negative (GN) Biochemical Identification System	Gram-negative bacteria	bioMérieux, Inc.	AOAC-OMA # 2011.17	N/A	N/A
S069	QIAGEN mericon <i>Salmonella</i> spp	<i>Salmonella</i> spp.	QIAGEN GmbH	AFNOR # QIA 36/01 - 02/13	All human food products, animal feed and environmental samples (except primary production stage environment)	25g
S070b	Solus Scientific <i>Salmonella</i> ELISA	<i>Salmonella</i> spp.	Solus Scientific Ltd.	AOAC-PTM # 051601	Raw chicken breast, raw salmon filet, bagged romaine lettuce, shredded cheddar cheese, instant non-fat dry milk, shell eggs, raw beef trim (375g), stainless steel environmental surface (swab, 1 x 1 in), polystyrene, environmental surface (sponge, 4 x 4 in)	25g except where noted in "Validated Matrices"
S071	Atlas™ <i>Salmonella</i> G2 Detection Assay	<i>Salmonella enterica</i>	Roka Biosciences, Inc.	AOAC-PTM # 041303	Fresh raw ground beef (25g, 375g), fresh raw ground turkey (375g), cooked deli turkey (325g), romaine lettuce (375 g), oat cereal, environmental surfaces (stainless steel, plastic, sealed concrete), peanut butter, raw almonds, string cheese, milk chocolate, cocoa powder, raw cookie dough, soy flour, whey powder, tomatoes, instant non-fat dried milk, chicken carcass rinse, pasteurized dried whole egg	25g except where noted in "Validated Matrices"
S072a	Thermo Scientific™ SureTect™ <i>Salmonella</i> species PCR Assay	<i>Salmonella</i> spp.	Oxoid Ltd. Part of Thermo Fisher Scientific	AOAC-PTM # 051303	(25 g; 1:10) Raw, ground: beef, pork frankfurters, raw chicken breast, bagged lettuce, non-fat dried milk powder, cooked shrimp, chilled ready-to-eat dinner, pasteurized liquid whole egg and stainless steel (4in x 4in, sponge), wet cat food, dry dog food, pasteurized 2% milk, bean sprouts, cantaloupe, chilled pizza dough, black peppercorns, peanut butter, ice cream, plastic surface, dark chocolate (85% cocoa solids), 20% fat raw ground beef (375g)	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S072b	Thermo Scientific SureTect <i>Salmonella</i> species PCR Assay	<i>Salmonella</i> spp.	OXOID Ltd, Part of Thermo Fisher Scientific	AFNOR # UNI 03/07 - 11/13	Non-seasoned raw ground beef meat	25g
S073a	3M™ Petrifilm™ <i>Salmonella</i> Express (SALX) System	<i>Salmonella</i> spp.	3M Company (3M Food Safety)	AOAC-PTM # 061301	Raw ground beef, raw ground pork, raw ground chicken, cooked chicken nuggets (325g), pasteurized liquid whole egg (100g), frozen uncooked shrimp, fresh bunched spinach, dry dog food (375g), stainless steel (sponge)	25g except where noted in "Validated Matrices"
S073b	3M™ Petrifilm™ <i>Salmonella</i> Express System	<i>Salmonella</i> spp.	3M Food Safety	AOAC-OMA # 2014.01	Raw ground beef, raw ground chicken, pasteurized liquid whole egg (100g), raw ground pork, cooked chicken nuggets (325g), frozen uncooked shrimp, fresh bunched spinach, dry dog food (375g), and stainless steel	25g except where noted in "Validated Matrices"
S074	mericon™ <i>Salmonella</i> spp. Kit	<i>Salmonella</i> spp.	Qiagen GmbH	AOAC-PTM # 071204	Fresh raw ground beef (25g), chicken carcass rinses, creamy non-organic	25g
S075a	BAX® System Real-Time PCR Assay for <i>Salmonella</i>	<i>Salmonella</i>	Hygiena	AOAC-PTM # 081201	Raw ground beef (25g, 375g), chicken carcass rinse (30mL), cream cheese (25g), bagged lettuce (25g), raw comminuted chicken (325g), turkey (325g), dry pet food (375g), and stainless steel, dry pet food, milk chocolate, chocolate liquor, cocoa powder, shell egg, stainless steel, plastic	25g except where noted in "Validated Matrices"
S075b	BAX® System Real-Time PCR Assay for <i>Salmonella</i>	<i>Salmonella</i> spp.	DuPont Nutrition & Health Diagnostics	AOAC-OMA # 2013.02	Raw ground beef (25g and 375g), ground beef with soy (25g and 325g), beef trim (25g and 325g), frankfurters (325g), shrimp, ground turkey, chicken wings, poultry rinse (30mL), whole powdered (dried) eggs, shell eggs (1000mL), fresh bagged lettuce, frozen peas, orange juice (pasteurized; 25mL), cream cheese, nonfat dry milk, ice cream, peanut butter, cocoa, white pepper, milk-based infant formula (25mL), dry pet food (375g), and on stainless steel, ceramic tile, and plastic	25g except where noted in "Validated Matrices"
S075c	BAX System Real-Time PCR Assay for <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	DuPont Qualicon	AFNOR # QUA 18/08 - 03/15	Meat products (including raw beef), egg products, vegetables, seafood, and pet food	25g
S076	Pathatrix® Auto <i>Salmonella</i> spp Kit Linked to Selective Agar Detection	<i>Salmonella</i> spp.	Life Technologies Corporation, Part of Thermo Fisher Scientific	AFNOR # ABI 29/06 - 11/13	Cooked meat products and raw beef meat, heat treated milk and dairy products	N/A
S077	Pathatrix® Auto <i>Salmonella</i> spp. Kit Linked to MicroSEQ® <i>Salmonella</i> spp. Detection Kit	<i>Salmonella</i> spp.	Life Technologies Corporation, Part of Thermo Fisher Scientific	AFNOR # ABI 29/07 - 11/13	Cooked meat products and raw beef meat, heat treated milk and dairy products	See Manufacturer's guidance
S078	ANSR® <i>Salmonella</i> Confirmation Test	<i>Salmonella</i> spp.	Neogen Corporation	AOAC-OMA # 2013.14	N/A	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S079	Actero™ <i>Salmonella</i> /STEC Enrichment Media	<i>Salmonella</i> spp./STEC (including O26, O45, O13, O111, O121, O145 & O157)	FoodChek System Inc.	AOAC-PTM # 041403	Raw ground beef (325 g), liquid whole egg (100 g), raw ground chicken (25 g), raw frozen scallops (25 g), sprouts (25 g), and Environmental surfaces (stainless steel (1 x 1 in), plastic, rubber (1 x 1 in), ceramic tiles(1 x 1 in), sealed concrete(1 x 1 in))	See "Validated Matrices"
S082a	foodproof <i>Salmonella</i> spp. method Automated protocol using the foodproof RoboPrep Series	<i>Salmonella</i> spp.	BIOTECON Diagnostics GmbH	MicroVal # 2011-LR40	Meat and Meat products (raw beef meat 375g), Milk and dairy products, Egg products, Feed samples	25g except where noted in "Validated Matrices"
S082b	foodproof <i>Salmonella</i> spp method Manual protocol	<i>Salmonella</i> spp.	BIOTECON Diagnostics GmbH	MicroVal # 2011-LR42	Food, feed and primary production samples, raw beef meat (375g)	25g except where noted in "Validated Matrices"
S083	Veriflow <i>Salmonella</i> species	<i>Salmonella</i> spp.	Invisible Sentinel	AOAC-PTM # 011404	Beef hot dogs, raw ground beef (20% fat), chicken carcass rinse, pasteurized milk (2%), stainless steel, ceramic tile, sealed concrete, and plastic, peanut butter, ground black pepper, whey protein isolate powder	N/A
S084	Hygiena Lateral Flow System for <i>Salmonella</i> AD (not sold in the US – international only)	<i>Salmonella</i> spp.	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 021001	Raw ground beef, raw ground chicken, sliced cooked turkey, chicken carcass rinses, liquid eggs	25g
S085b	GENE-UP® <i>Salmonella</i>	<i>Salmonella</i> spp.	bioMérieux, sa	AFNOR # BIO 12/38 - 06/16	All human food products, except raw milk products, by conducting validation assays on a broad range of food and environmental samples excluding environment of primary production stage	25g
S086a	BACGene <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	Eurofins GeneScan GmbH	AFNOR # EGS 38/01 - 03/15	All human food products, feed products, pet foods (375g), production environmental samples, milk powders and infant formula without probiotics (50g, 375g)	25g except where noted in "Validated Matrices"
S086b	BACGene <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	Eurofins GeneScan GmbH	AOAC-PTM # 121501	Fresh raw ground beef (15% fat), frozen spinach, pasteurized whole liquid egg (25mL), frozen cod fillet, raw whole milk (25mL), dog pâté (composed of beef meat and animal by-products, cereals, carrots and vegetable bi-products, 375g), dry dog pellets, infant formula milk powder supplemented with probiotics (Bifidus lactis) (375g), process water from scalding tank, and stainless steel environmental surface (1" x 1" area), cocoa butter (375g), cocoa liquor (375g), cocoa powder (375g), milk chocolate (375g), raw ground beef (375g), raw ground pork (250g), marinated raw chicken with brine (250g), ice cream (25g), dry pet food (375g), ceramic tiles (4"x4"), cotton swabs for swabbing 100cm2 of pork carcasses	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S087a	3M Molecular Detection Assay 2 (MDA2) - <i>Salmonella</i>	<i>Salmonella</i>	3M Food Safety	AOAC-PTM # 091501	Raw ground beef (73% lean, 25g & 325g), raw ground chicken (25g & 325g), chicken carcass rinse (30mL), chicken carcass sponge, pasteurized liquid whole egg (100g), cooked breaded chicken (325g), instant non-fat dry milk (25 g), black pepper (25 g), cocoa powder (25 g), raw whole shrimp (25 g), raw bagged spinach (25 g), creamy peanut butter (25g & 375g), dry dog food (25g & 375g), pasteurized processed American cheese (25 g), spent sprout irrigation water (375mL), and environmental surfaces sealed concrete (sponge, 225 mL enrichment broth), stainless steel (10 mL enrichment broth), and sealed ceramic tile (sponge, 50 mL enrichment broth).	See "Validated Matrices"
S087b	3M Molecular Detection Assay 2 - <i>Salmonella</i> Method	<i>Salmonella</i> spp.	3M Food Safety	AOAC-OMA # 2016.01	Raw ground beef (73% lean, 25g & 325g), raw ground chicken (25g & 325g), chicken carcass rinse (30mL), chicken carcass sponge, pasteurized liquid whole egg (100g), cooked breaded chicken (325g), instant non-fat dry milk, black pepper, cocoa powder, raw whole shrimp, raw bagged spinach, creamy peanut butter (25g & 375g), dry dog food (25g & 375g), pasteurized processed American cheese, spent sprout irrigation water (375mL), and environmental surfaces (sealed concrete, stainless steel, and sealed	25g except where noted in "Validated Matrices"
S088	<i>Salmonella</i> ELISA Test OPTIMA	<i>Salmonella</i> spp.	Eurofins GeneScan GmbH	AOAC-PTM # 960901	Contact Manufacturer	25g
S090	Reveal 2.0 Group D1 <i>Salmonella</i> (including <i>Salmonella</i> Enteritidis)	<i>Salmonella</i> Enteritidis <i>subsp. enterica</i> serovar	Neogen Corporation	AOAC-PTM # 041602	Raw shell eggs (20 shells), poultry feed (25g), chicken carcass rinse (30ml)	25g
S091	Xpress™ S	<i>Salmonella</i> spp.	Crystal Diagnostics Corporation	AOAC-PTM # 051602	Whole raw tomatoes, whole chicken rinsate, raw ground beef (325g), raw beef trim (325g), liquid whole eggs (100g)	N/A
S092	<i>Salmonella</i> Velox	<i>Salmonella</i> spp.	DNA Diagnostic A/S	NordVal # 046	raw meat (25-125g), chicken, fish and seafood, minced meat (25-100g)	25g except where noted in "Validated Matrices"
S093	SALMA™ One Day	<i>Salmonella</i> spp.	bioMérieux	AFNOR # BIO 12/41 - 03/17	All human food products (by performing validation assays on a broad range of foods), feed products and production environmental samples and surface areas (excluding environment from primary production stage)	25g
S094	3M™ Molecular Detection Assay 2 - <i>Salmonella</i>	<i>Salmonella</i> spp.	3M Health Care	AFNOR # 3M 01/16 - 11/16	All human food products (by concluding validated assays on a broad range of foods) and production environmental samples (excluding primary production samples)	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S096	Thermo Fisher <i>Salmonella</i> species, Typhimurium and Enteritidis Multiplex PCR Kit	<i>Salmonella</i> species, <i>Salmonella</i> ser. Typhimurium and <i>Salmonella</i> ser. Enteritidis	Oxoid Ltd. Part of Thermo Fisher Scientific	AOAC-PTM # 081701	(25 g) Raw chicken thighs with skin, raw chicken wings with skin, chicken nuggets, raw pork sausage, stainless steel environmental surface (4in x 4in sponge), raw ground turkey (375g), chicken carcass rinse, shell eggs	25g except where noted in "Validated Matrices"
S097	GDS <i>Salmonella</i> Tq detection Kit for the detection of <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	Merck MiliporeSigna	MicroVal # 2015LR50	Raw beef meats, delicatessen and heat treated meat products (with 25 g sampling), Dairy products (with 25 g sampling), Fruits and vegetables (with 25 g sampling), Environmental samples (with 25 g or surface sampling), Raw beef meats (with 375 g sampling), raw poultry meats (25g)	See "Validated Matrices"
S098	iQ-Check <i>Salmonella</i> II Real-Time PCR test kit	<i>Salmonella</i> spp.	Bio-Rad (Hercules, CA, USA)	AOAC-OMA # 2017.06	375 g test portions of raw ground chicken, ready-to-eat (RTE) deli ham, dry dog food, milk chocolate, raw milk cheese, to chicken carcass rinse (30 mL), to 25 g test portions of whole eggs, raw ground beef, raw ground chicken, cantaloupe, peanut butter, raw chicken breast, raw pork, fresh spinach, dry dog food, wet cat food, and to environmental samples from stainless steel, ceramic, plastic, and sealed	See "Validated Matrices"
S099	PDX-STEC	<i>Shiga toxin-producing E. coli</i> (STEC) <i>Salmonella</i> spp.	Paradigm Diagnostics, Inc.	AOAC-PTM # 101705	Raw beef trim 325g	See "Validated Matrices"
S100	VereBeef™ Detection Kit	(8-20 hr) <i>Escherichia coli</i> O157:H7, STEC virulence factors (<i>stx1A</i> or <i>stx2A</i> and <i>eae</i>) (10-20 hr) <i>Escherichia coli</i> O26, O45, O103, O111, O121, O145, <i>Salmonella</i> spp.	Veredus Laboratories Pte, Ltd.	AOAC-PTM # 011801	Raw beef trim 25g, 325g, 375g	See "Validated Matrices"
S102	Assurance VIP® Gold for <i>Salmonella</i>	<i>Salmonella</i> spp.	BioControl Systems, Inc.	AOAC-PTM # 031801	Chicken carcass rinsate, ready-to-eat poultry, roast beef,	N/A
S103	PolySkoPe 1.0 Multiplex Detection Assay	STECs, <i>E. coli</i> O157:H7 & Non-O157 STEC Big 6 (O26, O45, O103, O111, O121, O145), <i>Listeria monocytogenes</i> , <i>Salmonella</i> species	PolySkoPe Labs	AOAC-PTM # 041801	(25g) Fresh raw ground beef (73% lean), deli turkey, fresh baby spinach, stainless steel (4x4 in sponge)	See "Validated Matrices"
S104	EnviroPRO Multiplex <i>Salmonella</i> and <i>Listeria</i>	<i>Listeria</i> species, <i>Salmonella</i> species	Invisible Sentinel Inc.	AOAC-PTM # 061801	Stainless steel environmental surfaces (4x4" squares)	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S105	SureFast <i>Salmonella</i> ONE	<i>Salmonella</i> species	Congen Biotechnologie GmbH	AOAC-PTM # 081803	(25g) Raw ground beef, frozen poultry meat, raw milk, fresh spinach, pasteurized liquid whole egg, pet food pellets, salami, pork minced meat, bacon, fresh ground chicken, fresh chicken carcass, frozen marinated chicken fillets, semi-skim milk powder, raw goat milk cheese, chocolate ice cream, salad with mayonnaise, paella, cream based pastry, dehydrated poultry proteins, wheat based flour, pet food	See "Validated Matrices"
S106	Solus <i>Salmonella</i> ELISA	<i>Salmonella</i> spp.	Solus Scientific (part of PerkinElmer Inc.)	AFNOR # SOL 37/01 - 06/13	All human and food products (by performing validation assays on a broad range of foods), feed products and production environmental samples(excluding primary production environmental samples)	N/A
S107	MALDI Biotyper® complete solution for the confirmation of <i>Salmonella</i> spp.	<i>Salmonella</i> spp.	Bruker Daltonik GmbH	MicroVal # 2017LR73	Only pure cultures/isolates	N/A
S108	SureFast <i>Salmonella</i> ONE	<i>Salmonella</i> spp.	CONGEN Biotechnologie GMBH	MicroVal # 2014LR43	A broad range of foods (poultry meat, meat products, dairy products, vegetables, (excluding sprouts) egg products, and feed)	N/A
S109	Bruker MALDI Biotyper Method	<i>Salmonella</i> spp., <i>Campylobacter</i> spp.	Bruker Daltonik GmbH, Bremen, Germany	AOAC-OMA # 2017.09	Only pure cultures/isolates	N/A
S110	Solus One <i>Salmonella</i>	<i>Salmonella</i> species (<i>Salmonella enterica</i> and <i>Salmonella bongori</i> , and <i>Salmonella</i> subspecies)	Solus Scientific	AOAC-PTM # 101801	Raw beef trim (>30% fat content, 375 g), pasteurized liquid egg (100 g), raw salmon (fillet, 25 g), cheddar cheese (shredded, 25 g), Romaine lettuce (bagged, 25 g), non-fat dry milk powder (NFDM, 375 g), stainless steel (18 gauge: 304 food grade with a brushed finish) and plastic (polystyrene) environmental surface, cocoa powder (375g), cocoa liquor (375g), milk chocolate bar (375g), honey mustard seasoning and flavored ranch seasoning, cinnamon powder, paprika	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S111	GENE-UP® <i>Salmonella</i> 2 (SLM 2)	<i>Salmonella</i> spp.	bioMérieux, s.a.	AOAC-PTM # 121802	Liquid whole egg, Cooked ham, Raw ground beef, Raw chicken, Lettuce, Chocolate, Dry pet food (25 g, 375 g), Stainless steel (sponge, 4 x 4 inches), Fresh raw ground beef 20% fat (25 g, 375 g), Fresh raw chicken breast, Fresh raw fish, Creamy peanut butter (25 g, 375 g), Vanilla ice cream, Chicken carcass rinse (30 mL), Raw ground chicken, Raw beef trim, Raw ground pork (375 g), Raw ground bison (375 g), Pasteurized liquid egg (100 g), Powdered egg (100 g), Whey protein powder (375 g), Dark chocolate (375 g), Garlic powder (375 g), Bulk bagged romaine lettuce (375 g), milk chocolate (NFDM with 0.1% brilliant green 25g), milk chocolate (NFDM).	25g except where noted in "Validated Matrices"
S112	Clear Safety <i>Salmonella</i>	<i>Salmonella enterica</i>	Clear Labs, Inc.	AOAC-PTM # 111802	Raw ground chicken (375 g), ready-to-eat deli turkey breast (375 g), chicken carcass rinse (30 mL) dry pet food (375 g) stainless steel (sponge)	See "Validated Matrices"
S113	QFast <i>Salmonella</i>	<i>Salmonella</i> spp.	iMICROQ, S.L.	AENOR # B59/000001	Veterinary samples originating from the poultry industry. Samples of animal food. Environmental samples originating from primary production (poultry industry). General Food: fruits and vegetables, dairy products and various products, including spices, mayonnaise and eggs, and meat	25 g
S114	QFast <i>Salmonella</i> Easy	<i>Salmonella</i> spp.	iMICROQ, S.L.	AENOR # B59/000002	Animal feed samples, Veterinary samples (faeces, shoe covers, necks), Environmental samples originating from primary production (poultry industry), General Food: fruits and vegetables, dairy products and various products, including spices, mayonnaise and eggs; and meat	25 g
S115	Solus One <i>Salmonella</i>	<i>Salmonella</i> spp.	Solus Scientific (part of PerkinElmer Inc.)	AFNOR # SOL 37/04 - 12/18	Ready-to-eat and ready-to-reheat (excluding smoked products), heat processed milk and dairy products, and egg products	N/A
S116	Thermo Scientific™ RapidFinder™ <i>Salmonella</i> species, Typhimurium and Enteritidis Multiplex PCR Kit	<i>Salmonella</i> spp., <i>S. Typhimurium</i> and <i>S. Enteritidis</i>	Oxoid Ltd, Part of Thermo Fisher Scientific	AFNOR # UNI 03/12 - 01/18	Raw pork and raw poultry meat, ready-to-eat and ready-to-reheat pork and poultrymeats and production environmental samples (excluding environment from primary production)	N/A
S117	BACSpec <i>Salmonella</i> 2	<i>Salmonella</i> ssp.	Eurofins GeneScan Technologies GmbH	AOAC-PTM # 111903	Mayonnaise-based vegetable salad, ground beef (fat content approx 20%), raw milk (fat content approx 4%), fresh spinach, pasteurized liquid egg, dry pet food, stainless steel (304L) surface (1"x1"), sealed ceramic tile surface (4"x4")	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S118	Simultaneous Multiplex Real Time PCR (SIMUL-qPCR) <i>Salmonella</i> Assay	<i>Salmonella</i> ssp.	Applied Food Diagnostics	AOAC-PTM # 042001	Raw beef trim (375g, 80% lean), raw ground beef (375g, 80% lean), raw ground poultry (375g), ready-to-eat cooked poultry (375g), pasteurized liquid eggs (100g), frankfurters/sausages (25g), poultry carcass rinses, dry pet food (375g), peanut butter (25g), stainless steel	See "Validated Matrices"
S119	Simultaneous Multiplex Real Time PCR (SIMUL-qPCR) <i>Salmonella</i> Assay	<i>Salmonella</i> ssp.	Applied Food Diagnostics	AOAC-PTM # 042002	Stainless steel (1"x1"), plastic (1"x1"), rubber (1"x1"), ceramic tile (1"x1"), and sealed concrete (1"x1")	See "Validated Matrices"
S120	PhageDx <i>Salmonella</i> Assay	<i>Salmonella</i> ssp.	Laboratory Corporation of America	AOAC-PTM # 121904	Raw ground turkey (25g), powdered infant formula (milk based) (100g)	See "Validated Matrices"
S121	<i>Salmonella</i> species DNA Test Kit	<i>Salmonella</i> ssp.	BioChek (UK) Ltd.	AFNOR # BCK 40/01 - 07/19	Ready to eat and ready to re-heat foods, meat products, ingredients and specific foods, feed products, production environmental samples and primary production samples	N/A
S122	GENE-UP® <i>Salmonella</i> (SLM) Test Method	<i>Salmonella</i> ssp.	bioMérieux, Inc.	AOAC-OMA # 2020.02	25 g test portions of fresh raw ground chicken, fresh raw chicken breast, fresh raw ground beef (80% lean), cooked ham, liquid whole egg, fresh raw fish, lettuce, creamy peanut butter, vanilla ice cream, dry pet food and milk chocolate; for 30 mL test portions of chicken carcass rinse; for 100 g test portions of pasteurized liquid eggs and powdered egg; for 375 g test portions of fresh raw ground beef (80% lean), raw beef trim, raw ground pork, raw ground bison, whey protein powder, dry pet food, creamy peanut butter, garlic powder, bulk bagged Romaine lettuce, dark chocolate and milk chocolate; for stainless steel environmental sponges	See "Validated Matrices"
S123	Solus One <i>Salmonella</i>	<i>Salmonella</i> ssp.	Solus Scientific	AOAC-OMA # 2020.03	Raw beef trim (375 g), instant nonfat dry milk powder (NFDM; 375 g), pasteurized liquid egg (100 g), raw salmon (25 g), cheddar cheese (25 g), romaine lettuce (25 g), honey mustard onion season (375 g), flavored ranch seasoning (375 g), cinnamon powder (25 g), paprika powder (25 g), and whole black peppercorns (25 g) and two environmental surfaces (stainless steel: sponges and polystyrene: swabs).	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
S124	One Broth One Plate for <i>Salmonella</i> (OBOPS)	<i>Salmonella</i> ssp.	Neogen Corporation	MicroVal # 2019LR88	Environmental samples, Feed samples, A broad range of foods	See "Validated Matrices"
S125	One Broth One Plate <i>Salmonella</i> (OBOP <i>Salmonella</i>)	<i>Salmonella enterica</i> , <i>bongori</i>	Neogen Corporation	AOAC-PTM # 102002	Raw ground turkey (25 g) chicken carcass rinse (whole carcass), pasteurized liquid egg (100 g), queso fresco (25 g), smoked salmon (25 g), cantalope (25 g), dry pet food (25 g and 375 g), chocolate (25 g and 325 g), black pepper (25 g), chili powder (25 g), sponge samples from stainless steel surfaces (4in x 4in)	See "Validated Matrices"
S126	EnviroX-F	<i>Salmonella</i> ssp.	PathogenDx	AOAC-PTM # 092001	WorldBio PUR-Blue™ Swabs in 5 mL of Hi-Cap broth - Environmental Surface Swabs (4in x 4in): Stainless Steel, Plastic (polystyrene), Rubber, and Sealed Concrete	See "Validated Matrices"

** N/A = Not available

Foodborne Pathogen Test Kits Validated by Independent Organizations

FSIS is making available a list of test kits that have been validated for detection of relevant foodborne pathogens (i.e., Salmonella, Campylobacter, Listeria spp. including L. monocytogenes, E. coli O157:H7 and non-O157 STEC). The list is intended to be informational and is not an endorsement or approval of any specific test kit, regardless of its inclusion in the list.

FSIS does not specifically endorse any of the mentioned test kits or products and acknowledges that equivalent test kits or products may be available for laboratory use. Likewise, FSIS does not require the use of any specific test kit, including those incorporated into FSIS's Microbiology Laboratory Guidebook methods. Instead, establishments and laboratories should choose test kits that are:

1) Validated for testing relevant foods by a:

- a) Recognized independent body (i.e., AOAC, AFNOR, MicroVal, NordVal),
- b) U.S. regulatory body (i.e., FSIS MLG or FDA BAM), or
- c) International Organization for Standardization (ISO) process

2) In addition, the validated method should be:

- a) Fit for the intended purpose and application (e.g., validated for the appropriate matrix and sample size to detect the appropriate foodborne pathogen), and
- b) Performed per the conditions of the validated protocol by a laboratory that assures the quality of the analytical results.

The table below contains a list of foodborne pathogen test kits that are validated by recognized independent organizations (i.e., AOAC, AFNOR, MicroVal, NordVal) and therefore meet criterion 1a above. However, the test kits in this list are not necessarily equivalent or appropriate for all testing applications.

FSIS intends to update validated test kit lists on a quarterly basis.

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
C002	BAX® System Real-Time PCR Assay for <i>Campylobacter jejuni</i> , <i>coli</i> , and <i>lari</i>	<i>Campylobacter jejuni</i> ; <i>Campylobacter coli</i> ; <i>Campylobacter lari</i>	Qualicon Diagnostics LLC, a Hygiena Company	NordVal # 039	Faeces on cloacae swabs (levels above 100 cfu/g)	N/A
C003	BAX® System Real-Time PCR Assay for <i>Campylobacter jejuni</i> , <i>coli</i> , and <i>lari</i>	<i>Campylobacter jejuni</i> ; <i>Campylobacter coli</i> ; <i>Campylobacter lari</i>	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 040702	Ready-to-eat turkey product & chicken carcass rinses	25g, 30mL
C004a	CampyFood Agar (CFA)	<i>Campylobacter</i> spp.	bioMérieux	AFNOR # BIO 12/30 - 05/10	Meat products and production environment samples	25g
C004b	CampyFood Agar (CFA)	<i>Campylobacter</i> spp.	bioMérieux, sa	AOAC-PTM # 071201	Fresh raw pork, raw chicken breast, processed chicken nuggets, chicken carcass rinsate, turkey carcass sampled with sponge	25g
C004c	CampyFood® agar method	<i>Campylobacter</i> spp.	bioMérieux	MicroVal # 2009LR28	Poultry products, meat products, environmental samples	25g
C005	<i>Campylobacter</i> real-time PCR	<i>Campylobacter</i> spp.	Eurofins Genescan	NordVal # 017	Chicken raw meat, faeces on cloacae swabs, disposal shoe covers with chicken feces	N/A
C007	iQ-Check™ <i>Campylobacter</i> Real-Time PCR	<i>Campylobacter jejuni</i> ; <i>Campylobacter coli</i> ; <i>Campylobacter lari</i>	Bio-Rad Laboratories	AOAC-PTM # 031209	Chicken carcass rinse, turkey carcass sponge, raw ground chicken breast	25g, 30mL

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
C008	Brilliance™ CampyCount Agar	<i>Campylobacter</i> spp.	Thermo Fisher Scientific	MicroVal # 2008LR12	Poultry products	N/A
C009	Singlepath® <i>Campylobacter</i>	<i>Campylobacter jejuni</i> ; <i>Campylobacter coli</i>	Merck KGaA	AOAC-PTM # 120401	Raw ground chicken, raw ground turkey, pasteurized milk	25g
C010	Veriflow™ <i>Campylobacter</i>	<i>Campylobacter</i> spp.	Invisible Sentinel, Inc.	AOAC-PTM # 101201	Chicken carcass rinse	N/A
C011a	VIDAS® <i>Campylobacter</i> (VIDAS CAM)	<i>Campylobacter</i> spp.	bioMérieux	AFNOR # BIO 12/29 - 05/10	Meat products and production environment samples	25g
C011b	VIDAS® <i>Campylobacter</i> (CAM)	<i>Campylobacter</i> spp.	bioMérieux, sa	AOAC-PTM # 051201	Fresh raw pork, raw chicken breast, processed chicken nuggets, chicken carcass rinsate, turkey carcass sampled with sponge	25g
C012	RAPID® <i>Campylobacter</i>	<i>Campylobacter</i> spp.	Bio-Rad	AFNOR # BRD 07/25 - 01/14	Meat and meat products Poultry and poultry products Environmental samples	N/A
C013	ANSR for <i>Campylobacter</i>	<i>Campylobacter jejuni</i> ; <i>Campylobacter coli</i> ; <i>Campylobacter lari</i>	Neogen Corporation	AOAC-PTM # 071601	Chicken carcass rinse and turkey carcass sponge	N/A
C015	Tadpole <i>Campylobacter jejuni</i> Real-Time PCR Identification Kit	<i>Campylobacter jejuni</i>	Suzhou Tadpole Biotechnology Co., Ltd.	AOAC-PTM # 081804	Only pure cultures/isolates	N/A
C016	MALDI Biotyper® complete solution for the confirmation of <i>Campylobacter</i> spp.	<i>Campylobacter</i> spp.	Bruker Daltonik GmbH	MicroVal # 2017LR74	Only pure cultures/isolates	N/A
C017	CASA™	<i>Campylobacter</i> spp.	bioMérieux	MicroVal # 2010LR38	Meat products, poultry products & environmental samples	N/A
C018	Bruker MALDI Biotyper Method	<i>Salmonella</i> spp., <i>Campylobacter</i> spp.	Bruker Daltonik GmbH, Bremen, Germany	AOAC-OMA # 2017.09	Only pure cultures/isolates	N/A
C019	3M Molecular Detection Assay 2	<i>Campylobacter jejuni</i> , <i>C. lari</i> and <i>C. coli</i>	3M Food Safety	AOAC-PTM # 111803	Chicken carcass rinse samples, poultry parts rinse samples, raw ground chicken (325g), turkey carcass sponge samples and ready-to-eat, breaded chicken nuggets (25g)	See "Validated Matrices"
C020	Tempo® Cam	<i>Campylobacter</i> spp.	bioMérieux, sa	AFNOR # BIO 12/43 - 04/20	Raw poultry, ready-to-eat poultry products	N/A

** N/A = Not available

Foodborne Pathogen Test Kits Validated by Independent Organizations

FSIS is making available a list of test kits that have been validated for detection of relevant foodborne pathogens (i.e., *Salmonella*, *Campylobacter*, *Listeria* spp. including *L. monocytogenes*, *E. coli* O157:H7 and non-O157 STEC). The list is intended to be informational and is not an endorsement or approval of any specific test kit, regardless of its inclusion in the list.

FSIS does not specifically endorse any of the mentioned test kits or products and acknowledges that equivalent test kits or products may be available for laboratory use. Likewise, FSIS does not require the use of any specific test kit, including those incorporated into FSIS's Microbiology Laboratory Guidebook methods. Instead, establishments and laboratories should choose test kits that are:

1) Validated for testing relevant foods by a:

- a) Recognized independent body (i.e., AOAC, AFNOR, MicroVal, NordVal),
- b) U.S. regulatory body (i.e., FSIS MLG or FDA BAM), or
- c) International Organization for Standardization (ISO) process

2) In addition, the validated method should be:

- a) Fit for the intended purpose and application (e.g., validated for the appropriate matrix and sample size to detect the appropriate foodborne pathogen), and
- b) Performed per the conditions of the validated protocol by a laboratory that assures the quality of the analytical results.

The table below contains a list of foodborne pathogen test kits that are validated by recognized independent organizations (i.e., AOAC, AFNOR, MicroVal, NordVal) and therefore meet criterion 1a above. However, the test kits in this list are not necessarily equivalent or appropriate for all testing applications.

FSIS intends to update validated test kit lists on a quarterly basis.

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L001	3M™ Petrifilm™ Environmental <i>Listeria</i> Plate	<i>Listeria monocytogenes</i> ; <i>Listeria innocua</i> ; <i>Listeria welshimeri</i>	3M Food Safety	AOAC-PTM # 030601	(Environmental swabs or sponges enriched in 5mL of buffered peptone water) stainless steel, ceramic tile, sealed concrete	N/A
L006	ACTERO™ <i>Listeria</i> Enrichment Media	<i>Listeria</i> spp.	FoodChek Systems, Inc	AOAC-PTM # 111201	Frankfurters, smoked turkey breast (125 g), cured ham (125 g), raw frozen salmon, cold smoked salmon, frozen cooked shrimp, cooked shrimp, ice cream, pasteurized milk, pasteurized 2% milk, soft Mexican-style cheese, bagged spinach, soft fresh ricotta cheese, liquid whole eggs, ceramic tile, rubber, sealed concrete, stainless steel, plastic	25g except where noted in "Validated Matrices"
L010	AL Detection	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	BIO-RAD	AFNOR # BRD 07/16 -01/09	All human food products and environmental samples	25g
L011	AL Enumeration	<i>Listeria monocytogenes</i>	BIO-RAD	AFNOR # BRD 07/17 -01/09	All human food products and environmental samples	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L012	ALOA® Count	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	bioMérieux	AFNOR # AES 10/05 - 09/06	All foodstuffs for human consumption and environmental samples	N/A
L013a	ALOA® One Day	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	bioMérieux	AFNOR # AES 10/03 – 09/00	All foodstuffs for human consumption and environmental samples	25g
L014a	ANSR™ for <i>Listeria</i>	<i>Listeria</i> spp. (<i>L. grayi</i> variable)	Neogen Corporation	AOAC-PTM # 101202	Pasteurized 2% milk, queso fresco, ice cream, smoked salmon, lettuce, cantaloupe, guacamole, pasteurized liquid egg, hot dog (125g), fermented sausage, deli turkey, stainless steel, plastic, ceramic tile, sealed concrete, rubber	25g except where noted in "Validated Matrices"
L014b	ANSR for <i>Listeria</i>	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	NEOGEN Europe Ltd.	AFNOR # NEO 35/03 - 01/16	All human food products and production environmental samples	N/A
L015a	Assurance GDS™ for <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	BioControl Systems, Inc.	AOAC-PTM # 070702	Liquid pasteurized milk, Mexican soft cheese, frankfurter, deli turkey, raw fish, raw green beans, environmental surfaces (stainless steel, rubber, concrete, plastic)	25g
L015b	Assurance GDS® <i>Listeria monocytogenes</i> Tq	<i>Listeria monocytogenes</i>	BioControl Systems Inc.	MicroVal # 2014LR32	All food products and environmental samples	25g
L016a	Assurance GDS™ for <i>Listeria</i> species	<i>Listeria</i> species including <i>L. monocytogenes</i> , <i>L. innocua</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i> , <i>L. ivanovii</i> and <i>L. grayi</i>	BioControl Systems, Inc.	AOAC-PTM # 070701	Liquid pasteurized milk, Mexican soft cheese, frankfurter, deli turkey, raw fish, raw green beans, environmental surfaces (stainless steel, rubber, concrete, plastic)	25g
L016b	Assurance GDS® <i>Listeria</i> spp. Tq	<i>Listeria</i> spp.	BioControl Systems Inc.	MicroVal # 2010LR31	All food products and environmental samples	25g
L017a	Assurance® <i>Listeria</i> EIA	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 996.14	Dairy foods, red meats, pork, poultry and poultry products, seafood, fruits, vegetables, nutmeats, pasta, chocolate, eggs, bone meal, and from environmental surfaces	25g
L017b	TRANSIA AG <i>Listeria</i>	<i>L. monocytogenes</i> , <i>L. innocua</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i> , <i>L. ivanovii</i> , <i>L. grayi</i>	BioControl Systems, Inc.	AOAC-PTM # 060802	Liquid pasteurized milk, Mexican soft cheese, raw beef trim, ready to eat turkey, raw green beans, raw fish, environmental surfaces (stainless steel, rubber, plastic)	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L018	BAX® system <i>L. monocytogenes</i>	<i>Listeria monocytogenes</i>	DuPont Qualicon (DuPont Nutrition & Health Diagnostics)	AOAC-OMA # 2003.12	Dairy products, fruits and vegetables (except radishes), seafoods, raw and processed meats, and poultry	25g
L019a	BAX® System PCR Assay for Genus <i>Listeria</i> 24E	<i>Listeria</i> spp.	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 050903	Bagged spinach, processed cheese, frankfurters, cooked shrimp, environmental surfaces (stainless steel)	25g
L019b	BAX® System PCR Assay for Genus <i>Listeria</i> 24E	<i>Listeria</i> spp. excluding <i>L. grayi</i>	Qualicon Diagnostics LLC	AFNOR # QUA 18/06 - 07/08	All human food products and environmental samples	25g
L020a	BAX® System PCR Assay for <i>Listeria monocytogenes</i> 24E	<i>Listeria monocytogenes</i>	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 080901	Bagged spinach, processed cheese, frankfurters, cooked shrimp, environmental surfaces (stainless steel)	25g
L020b	BAX® System PCR Assay for <i>Listeria monocytogenes</i> 24E	<i>Listeria monocytogenes</i>	Qualicon Diagnostics LLC	AFNOR # QUA 18/05 - 07/08	All human food products and production environmental samples	25g
L021	BAX® System PCR Assay for <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 070202	Chocolate ice cream, milk (2%), vanilla yogurt, apple juice, cabbage slaw, fish sticks, frankfurters, langostinos, orange juice, peas, pepperoni, spinach strawberries, surimi, deli turkey, ground pork, queso fresco, plastic (4" x 4")	25g
L022	BAX® System PCR Assay for Screening Genus <i>Listeria</i>	<i>Listeria</i> spp. including <i>L. monocytogenes</i> , <i>L. innocua</i> , <i>L. ivanovii</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i>	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 030502	Processed cheese, frankfurters, smoked salmon, spinach, environmental surfaces (plastic ceramic, tile, rubber, painted wood surfaces, unpainted wood, sealed concrete, cast iron, air filter material, & drain swabs)	25g
L023	BBL™ CHROMagar™ <i>Listeria</i>	<i>Listeria monocytogenes</i> , <i>Listeria ivanovii</i>	Becton Dickinson and Company	AOAC-PTM # 060501	Raw ground beef, smoked salmon, lettuce, brie cheese	N/A
L027	ChromID Lmono Agar (LMO-F) for <i>Listeria monocytogenes</i> enumeration	<i>Listeria monocytogenes</i>	bioMérieux	MicroVal # 2010LR35	All food categories & environmental samples	N/A
L029a	Compass® <i>Listeria</i> Agar (Detection)	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	SOLABIA SAS	AFNOR # BKR 23/02-11/02	All human food products and production environment samples	25g
L029b	Compass® <i>Listeria</i> Agar (Enumeration)	<i>Listeria monocytogenes</i>	SOLABIA SAS	AFNOR # BKR 23/05-12/07	All human food products and production environment samples	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L030	Hygiena Lateral Flow System <i>Listeria</i> species	<i>Listeria</i> spp.		AOAC-PTM # 080501	Ice cream, soft cheese, milk, deli turkey, pepperoni, hot dogs, roast beef, cooked shrimp, smoked fish, potato salad, environmental surfaces (rubber, painted concrete, stainless steel)	25g
L032a	foodproof® <i>Listeria monocytogenes</i> Detection Kit in combination with the foodproof® ShortPrep II Kit	<i>Listeria monocytogenes</i>	BIOTECON Diagnostics GmbH	AOAC-PTM # 070401	Dried whole eggs, dry whole milk, vanilla ice cream, Harzer cheese, sausage, raw ground chicken, raw ground pork, ham, gravlax, pollack fillet, melon cubes, white cabbage, bean sprouts, paprika emulsion dye, parsley flakes, dry pet food, peanut butter, milk chocolate, pizza, spaghetti	25g
L032b	foodproof® <i>Listeria monocytogenes</i> Detection Kit, Hybridization Probes and foodproof® <i>Listeria monocytogenes</i> Detection Kit, 5' Nuclease in combination with foodproof® ShortPrep II Kit	<i>Listeria monocytogenes</i>	BIOTECON Diagnostics GmbH	NordVal # 025	Foods and environmental samples	25g
L033	GeneDisc® Plate <i>Listeria</i> DUO Detection Kit	<i>Listeria</i> spp. & <i>Listeria monocytogenes</i>	Pall GeneDisc Technologies	AOAC-PTM # 031206	Deli roast beef, hot dogs, deli turkey, raw shrimp, cold smoked salmon, romaine lettuce, pasteurized whole milk, vanilla ice cream, Brie cheese, liquid eggs, environmental surfaces (stainless steel, sealed samples)	N/A
L034a	GeneDisc® <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Pall GeneDisc Technologies	AFNOR # GEN 25/08 - 07/10	All human food products and production environment samples	25g
L034b	GeneDisc® Plate <i>Listeria monocytogenes</i> Detection Kit	<i>Listeria monocytogenes</i>	Pall GeneDisc Technologies	AOAC-PTM # 031204	Deli roast beef, hot dogs, deli turkey, raw shrimp, cold smoked salmon, romaine lettuce, pasteurized whole milk, vanilla ice cream, Brie cheese, liquid eggs, environmental surfaces (stainless steel, sealed samples)	N/A
L035a	GeneDisc® <i>Listeria</i> spp.	<i>Listeria</i> spp.	Pall GeneDisc Technologies	AFNOR # GEN 25/07 - 07/10	All human food products and production environment samples	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L035b	GeneDisc® Plate <i>Listeria</i> spp. Detection Kit	<i>Listeria</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 031205	Deli roast beef, hot dogs, deli turkey, raw shrimp, cold smoked salmon, romaine lettuce, pasteurized whole milk, vanilla ice cream, Brie cheese, liquid eggs, environmental surfaces (stainless steel, sealed concrete)	N/A
L036	GeneDisc® Plate <i>Listeria</i> Identification Kit	<i>L. monocytogenes</i> , <i>L. innocua</i> , <i>L. ivanovii</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i>	Pall GeneDisc Technologies	AOAC-PTM # 031207	Pure colonies from OXA, MOX, OAA, PALCAM, Rapid'L.mono agar & Nutrient	N/A
L037	GeneQuence™ <i>Listeria</i> Microwell Test	<i>Listeria</i> spp.	Neogen Corporation	AOAC-PTM # 010403	Parmesan cheese, brie cheese, pasteurized milk, ice cream, cottage cheese, mayonnaise, ground beef, deli turkey, hot dogs, ground pork, deli ham, lettuce, mixed vegetables, alfalfa sprouts, raw shrimp, pasteurized crab meat, smoked salmon, environmental surfaces (stainless steel, ceramic, cast iron, plastic, concrete, painted)	25g
L038	GENE-TRAK <i>Listeria</i>	<i>Listeria</i> spp.	Neogen Corporation	AOAC-OMA # 993.09	Dairy products, meats, and seafoods	25g
L040	IEH <i>Listeria</i> spp. & <i>Listeria monocytogenes</i> Test System	<i>Listeria</i> spp. & <i>Listeria monocytogenes</i>	IEH Laboratories & Consulting Group	AOAC-PTM # 021201	Raw beef trim, ready-to-eat turkey, environmental surfaces (stainless steel, plastic)	25-375g
L041a	iQ-Check™ <i>Listeria monocytogenes</i> II	<i>Listeria monocytogenes</i>	BIO-RAD	AFNOR # BRD 07/10 - 04/05	All human foodstuffs and environmental samples	25g
L041b	iQ-Check™ <i>Listeria monocytogenes</i> II PCR Detection Kit	<i>Listeria monocytogenes</i>	Bio-Rad Laboratories	AOAC-PTM # 010802	Smoked salmon, cottage cheese, hot dogs, deli turkey, live pate, raw fermented sausage, deli ham.	25g
L041c	iQ-Check™ <i>Listeria monocytogenes</i> II	<i>Listeria monocytogenes</i>	Bio-Rad Laboratories	NordVal # 037	Foods and environmental samples	25g
L042a	iQ-Check™ <i>Listeria</i> species	<i>Listeria</i> spp.	BIO-RAD	AFNOR # BRD 07/13 - 05/07	All human foodstuffs and environmental samples	25g
L042b	iQ-Check™ <i>Listeria</i> spp. PCR Detection Kit	<i>Listeria</i> spp.	Bio-Rad Laboratories	AOAC-PTM # 090701	Liver pate, hot dogs, raw fermented sausage, sliced deli turkey, sliced deli ham (25g), natural cheese (125g), stainless steel (4 x 4 in, sponge) polystyrene plastic (1 x1 in swab), sealed concrete (4 x4 in, sponge)	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L044a	<i>Listeria</i> Precis™ (Detection)	<i>Listeria monocytogenes</i>	OXOID Ltd, Part of Thermo Fisher Scientific	AFNOR # UNI 03/04 -04/05	All human food products and environmental samples	25g
L044b	<i>Listeria</i> Precis™ (Enumeration)	<i>Listeria monocytogenes</i>	OXOID Ltd, Part of Thermo Fisher Scientific	AFNOR # UNI 03/05 -09/06	All human food products and environmental samples	N/A
L045	<i>Listeria</i> -Tek ELISA	<i>Listeria monocytogenes</i>	Organon Teknika Corporation	AOAC-OMA # 994.03	Meat, meat products, fish, dairy products	25g
L046	LUMIprobe 24 <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	EUROPROBE SA	AFNOR # EUR 15/03 - 12/05	All human food products and environmental samples	25g
L047	Microgen™ <i>Listeria</i> -ID	<i>Listeria</i> spp.	Microgen Bioproducts Ltd	AOAC-PTM # 060402	Pure culture	N/A
L048	MICRO-ID <i>Listeria</i>	<i>Listeria</i> spp.	Organon Teknika Corporation	AOAC-OMA # 992.18	Foods and environmental samples	N/A
L049a	MicroSEQ <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Life Technologies Corporation, part of Thermo Fisher Scientific	AFNOR # ABI 29/05 - 12/11	meat products, dairy products, fishery products, vegetables and environmental samples	25g
L049b	MicroSEQ® <i>Listeria monocytogenes</i> Detection Kit	<i>Listeria monocytogenes</i>	Applied Biosystems	AOAC-PTM # 011002	Pasteurized whole milk, dry infant formula, ice cream, roast beef, cured bacon, lox (cold-smoked salmon), lettuce, salad dressing and mayonnaise	25g
L050a	MicroSEQ <i>Listeria</i> spp.	<i>Listeria</i> spp.	Life Technologies Corporation, part of Thermo Fisher Scientific	AFNOR # ABI 29/04 - 12/11	meat products, dairy products, fishery products, vegetables, and environmental samples	N/A
L050b	MicroSEQ® <i>Listeria</i> spp. Detection Kit	<i>Listeria</i> spp.	Applied Biosystems	AOAC-PTM # 021108	Pasteurized whole cows milk, dry infant formula, hot dogs, roast beef, lox (smoked salmon), environmental surfaces (stainless steel, plastic cutting board, ceramic tile, rubber sheets, concrete sealed with Seal Hard®)	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L051b	3M™ Molecular Detection Assay (MDA) <i>Listeria</i> Method	<i>Listeria</i> spp.	3M Food Safety	AOAC-OMA # 2014.06	Beef hot dogs (25g), deli turkey (25g), cold smoked salmon (25g), full-fat cottage cheese (25g), bagged raw spinach (25g), whole cantaloupe melone, sealed concrete (sponge in 100mL and sponge in 225mL enrichment volume), stainless steel (sponge in 225mL enrichment volume), and plastic (swab in 10ml enrichment volume) enriched in pre warmed Demi Fraser (DF) broth	See "Validated Matrices"
L053	PATHATRIX Pooling System for <i>Listeria</i> species	<i>Listeria</i> spp.	LifeTechnologies part of Thermo Fisher Scientific	AOAC-PTM # 090201B	Raw ground beef, cooked sliced ham, milk powder, orange juice, soft cheese, single cream, ground black pepper, chocolate, cooked chicken, lasagna ready meal, frozen pawns, soft cheese, cream, cooked chicken	25g
L054	PDX- LIB	<i>Listeria</i> spp. including <i>L. monocytogenes</i> , <i>L. innocua</i> , <i>L. ivanovii</i> , <i>L. welshimeri</i>	Paradigm Diagnostics, Inc.	AOAC-PTM # 040501	Environmental surfaces (ceramic tile, stainless steel, plastic, & sealed concrete)	N/A
L055a	RAPID'L. <i>mono</i> (Detection)	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	BIO-RAD	AFNOR # BRD 07/04 - 09/98	All human food products and environmental samples	25g
L055b	RAPID'L. <i>mono</i> (Enumeration)	<i>Listeria monocytogenes</i>	BIO-RAD	AFNOR # BRD 07/05 - 09/01	All human food products and environmental samples	N/A
L055c	RAPID'L. <i>mono</i>	<i>Listeria monocytogenes</i>	Bio-Rad Laboratories	AOAC-PTM # 030406	Brie cheese, surimi, mixed salad, & deli turkey	N/A
L055d	RAPID'L. <i>mono</i>	<i>Listeria monocytogenes</i>	Bio-Rad Laboratories	NordVal # 022	Foods and environmental samples	25g
L056	RapidChek® <i>Listeria</i>	<i>Listeria</i> spp.	Romer Labs Technology, Inc.	AOAC-PTM # 020401	Ice cream, soft cheese, pasteurized whole milk, deli turkey, pepperoni, hot dogs, roast beef, cooked shrimp, smoked fish, potato salad, environmental surfaces (rubber, painted concrete, stainless steel)	25g
L057a	RAPID'L. <i>Listeria</i> spp.	<i>Listeria</i> spp.	Bio-Rad Laboratories	AFNOR # BRD 07/12 - 12/06	All human food products and environmental samples	25g
L057b	RAPID'L. <i>Listeria</i> spp.	<i>Listeria</i> spp.	Bio-Rad Laboratories	AOAC-PTM # 080701	Environmental surfaces (stainless steel, plastic, ceramic, sealed concrete)	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L058	Reveal® 2.0 <i>Listeria</i> Test System	<i>Listeria</i> spp. excluding <i>L. grayi</i>	Neogen Corporation	AOAC-PTM # 041101	Pasteurized liquid egg, ice cream, parmesan cheese, 2% milk, deli turkey, hot dogs, frozen cooked hamburgers, pepperoni, pasteurized crab meat, smoked salmon, environmental surfaces (stainless steel, ceramic tile, plastic cement)	25g
L059	Roka <i>Listeria</i> Detection Assay	<i>Listeria</i> spp., (<i>Listeria monocytogenes</i> , <i>L. innocua</i> , <i>L. welshimeri</i> , <i>L. ivanovii</i> , <i>L. seeligeri</i> , <i>L. grayi</i>)	Roka Bioscience, Inc.	AOAC-PTM # 011201	Pasteurized whole milk, ice cream, brie cheese, hot dogs, cured ham, deli chicken, chicken salad, cold-smoked salmon, romaine lettuce. Stainless steel, sealed concrete, plastic (swab or sponge enriched in 90ml)	25g
L060	RapidChek® <i>Listeria</i> NextDay™ Food and Environmental Test System	<i>Listeria</i> spp.	Romer Labs Technology, Inc.	AOAC-PTM # 101102	Hot dogs (25g, 125g), roast beef (25g), frozen breaded chicken (25g, 125g), frozen meatballs (25g), whole milk (25g), ice cream (25g), ricotta cheese (25g), shredded Mexican cheese (125g), cheese powder (25g), and environmental surfaces (stainless steel [430SS, food grade], plastic [polyurethane, food grade], rubber [synthetic, food grade], and painted concrete [latex-based white	See "Validated Matrices"
L061b	TRANSIA® PLATE <i>Listeria</i> spp.	<i>Listeria</i> spp.	MilliporeSigma (part of Merck group)	AFNOR # TRA 02/06 - 11/95	All food products and environmental samples	25g
L062	TRANSIA® Plate <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	MilliporeSigma (part of Merck group)	AFNOR # TRA 02/11 - 03/08	All human food products and environmental samples	N/A
L063a	VIDAS® <i>L. monocytogenes</i> Xpress (VIDAS LMX)	<i>Listeria monocytogenes</i>	bioMérieux	AFNOR # BIO 12/27 - 02/10	All human food products and environmental samples	25g
L063b	VIDAS® <i>Listeria monocytogenes</i> Xpress (LMX)	<i>Listeria monocytogenes</i>	bioMérieux, sa	AOAC-PTM # 091103	Spinach, peanut butter, shrimp, smoked fish, liver pâté, raw fermented sausage, turkey hot dogs, processed cheese, ice cream (25 g), ground beef (125 g), deli ham (125 g), deli turkey (125 g) Mexican soft cheese (125g)	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L063c	VIDAS® <i>Listeria monocytogenes</i> Xpress (LMX) Method	<i>Listeria monocytogenes</i>	bioMérieux, sa	AOAC-OMA # 2013.11	Deli ham (25g, 125g), fermented sausage, liver pâté, processed cheese, vanilla ice cream, cooked shrimp, smoked white fish, frozen spinach, peanut butter, deli turkey (25g, 125g), queso fresco (125g), and ground beef (125g)	25g except where noted in "Validated Matrices"
L064a	VIDAS® <i>Listeria</i> (LIS)	<i>Listeria</i> spp.	bioMérieux	AFNOR # BIO 12/02 - 06/94	All human food products and production environment samples	25g/25mL
L064b	VIDAS® <i>Listeria</i> (LIS)	<i>Listeria</i> spp.	bioMérieux, sa	AOAC-OMA # 2004.06	Dairy products, vegetables, seafood, raw meats and poultry, and processed meats and poultry	25g
L064c	VIDAS® <i>Listeria</i> (LIS)	<i>Listeria</i> spp.	bioMérieux, sa	AOAC-OMA # 999.06	Dairy products, vegetables, seafoods, raw meats and poultry, and processed meats and poultry	25g
L064d	VIDAS® <i>Listeria</i> Assay (LIS)	<i>Listeria</i> spp.	bioMérieux, sa	AOAC-PTM # 981202	Raw meats and poultry, cooked and processed meats and poultry, seafood, vegetables, dairy products, & environmental samples	25g
L065a	VIDAS® <i>Listeria</i> DUO (LDUO)	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	bioMérieux	AFNOR # BIO 12/18 - 03/06	All human food products and environmental samples	25g/25mL
L065b	VIDAS® <i>Listeria</i> DUO (LDUO) with Ottaviani Agar	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	bioMérieux, sa	AOAC-PTM # 100702	Cheddar cheese, camembert cheese, pasteurized milk, yogurt, vanilla ice cream, raw pork, meat frankfurters, frozen ground beef, ham, roast beef, chicken frankfurters, raw ground chicken, raw cod, frozen cooked shrimp, crab meat, frozen green beans, cauliflower	25g
L066	VIDAS® <i>Listeria monocytogenes</i> 2 (VIDAS LMO2) (Enrichment at 30°C)	<i>Listeria monocytogenes</i>	bioMérieux	AFNOR # BIO 12/09 - 07/02	All human food products (except raw products) and environmental samples	25g
L067	VIDAS® <i>Listeria monocytogenes</i> 2 (VIDAS LMO2) (Enrichment at 37°C)	<i>Listeria monocytogenes</i>	bioMérieux	AFNOR # BIO 12/11 -03/04	All human food products and environmental samples	25g
L068c	VIDAS® <i>Listeria</i> species Xpress (LSX)	<i>Listeria</i> spp.	bioMérieux, sa	AOAC-OMA # 2010.02	Dairy products, vegetables, seafood, raw meats and poultry, and processed meats and poultry	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L069	VIDAS® LMO2	<i>Listeria monocytogenes</i>	bioMérieux, sa	AOAC-OMA # 2004.02	Dairy products, vegetables, seafood, raw meats and poultry, and processed meats and poultry	25g
L070a	VIDAS® UP <i>Listeria</i> (LPT)	<i>Listeria</i> spp.	bioMérieux	AFNOR # BIO 12/33 - 05/12	Human food products and production environment samples	N/A
L070b	VIDAS® UP <i>Listeria</i> (LPT)	<i>Listeria</i> spp.	bioMérieux, sa	AOAC-OMA # 2013.10	Deli ham (25 and 125 g), pepperoni (25 g), beef hot dogs (25 g), chicken nuggets (25 g), chicken liver pâté (25 g), ground beef (125 g), deli turkey (125 g), cooked shrimp (25 g), smoked salmon (25 g), whole cantaloupe melon, bagged mixed salad (25 g), peanut butter (25 g), black pepper (25 g), vanilla ice	See "Validated Matrices"
L071a	VIP® Gold for <i>Listeria</i>	<i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	BioControl Systems, Inc.	AOAC-OMA # 997.03	Dairy foods, red meats, pork, poultry and poultry products, seafood, fruits, vegetables, nutmeats, pasta, chocolate, eggs, bone meal, and environmental surfaces	25g
L071b	VIP® for <i>Listeria</i>	<i>L. monocytogenes</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i> , <i>L. ivanovii</i> , <i>L. grayi</i>	BioControl Systems, Inc.	AOAC-PTM # 060801	Liquid pasteurized milk, Mexican soft cheese, raw beef trim, ready to eat turkey, raw green beans, raw fish, environmental surfaces (stainless steel, rubber, plastic)	25g
L072	Vitek GPI and GNI+	<i>Listeria</i> spp.	bioMérieux, sa	AOAC-OMA # 992.19	N/A	N/A
L073a	Solus <i>Listeria</i> ELISA	<i>Listeria</i> spp.	Solus Scientific (part of PerkinElmer Inc.)	AFNOR # SOL 37/02 - 06/13	Human food products and environmental samples	N/A
L073b	Solus Scientific <i>Listeria</i> ELISA	<i>Listeria</i> spp.	Solus Scientific Ltd.	AOAC-PTM # 041601	Bagged romaine lettuce, hot dogs, frozen raw shrimp, smoked salmon, soft cheese (brie), stainless steel (swab, 1 x 1 in), polystyrene (sponge, 4 x 4 in)	25g
L074	VITEK ® 2 Gram Positive (GP)	Gram-positive bacteria, including <i>Listeria</i> spp. and <i>Staphylococcus</i> spp.	bioMérieux, sa	AOAC-OMA # 2012.02	N/A	N/A
L075	InstantLabs® <i>Listeria</i> Species Food Safety Kit	<i>Listeria</i> spp.	InstantLabs Medical Diagnostics Corporation	AOAC-PTM # 041304	Hot dogs, raw Shrimp, cheddar cheese, and environmental surfaces (stainless steel, sealed concrete)	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L076	InstantLabs® <i>Listeria monocytogenes</i> Food Safety Kit	<i>Listeria monocytogenes</i>	InstantLabs Medical Diagnostics Corporation	AOAC-PTM # 051302	Hot dogs, deli turkey, romaine lettuce, raw shrimp, cheddar cheese, vanilla ice cream, pasteurized whole milk, and environmental surfaces (stainless steel, sealed concrete)	25g
L077	Veriflow™ <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Invisible Sentinel	AOAC-PTM # 051304	Beef hot dogs (14% fat), deli turkey (2% fat), stainless steel, ceramic tile, concrete, plastic	N/A
L078a	Thermo Scientific™ SureTect™ <i>Listeria monocytogenes</i> PCR Assay	<i>Listeria monocytogenes</i>	Oxoid Ltd. Part of Thermo Fisher Scientific	AOAC-PTM # 061302	Raw ground beef, pork frankfurters, salami, cooked sliced turkey, fresh bagged spinach, ice cream, smoked salmon, cooked prawns, fresh cantaloupe, processed cheese, raw ground turkey, raw ground pork, pasteurized 2% milk, raw pork sausage, raw cod, pasteurized brie cheese, cooked sliced ham, bagged lettuce, sliced deli turkey, bagged lettuce, pasteurized 2% fat milk, plastic, (1x1 in swab) stainless steel	25g
L078b	Thermo Scientific™ SureTect™ <i>Listeria monocytogenes</i> PCR Assay	<i>Listeria monocytogenes</i>	OXOID Ltd, part of Thermo Fisher Scientific	AFNOR # UNI 03/08 - 11/13	All human food products and production environmental samples	N/A
L079	Atlas® <i>Listeria monocytogenes</i> LmG2 Detection Assay	<i>Listeria monocytogenes</i>	Roka Bioscience, Inc	AOAC-PTM # 111301	Hot dogs, cured ham, deli turkey (125g), chicken salad, environmental surfaces (stainless steel), frozen chocolate cream pie, frozen cheese pizza, vanilla ice cream, queso fresco (125g), cantaloupe	25g except where noted in "Validated Matrices"
L080	DETECT/L™ Test	<i>Listeria</i> spp. (<i>L. monocytogenes</i> , <i>L. innocua</i> , <i>L. ivanovii</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i> & <i>L. marthii</i>)	Sample6	AOAC-PTM # 041401	Environmental surface (Stainless steel)	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L081	mericon® <i>Listeria monocytogenes</i> Pathogen Detection Assay	<i>Listeria monocytogenes</i>	Qiagen GmbH	AOAC-PTM # 061401	Uncooked hot dogs, deli turkey, smoked salmon, mung bean sprouts, pasteurized whole milk, environmental surfaces (stainless steel, ceramic tile, plastic, and sealed concrete), non-smoked gouda cheese, mozzarella cheese	N/A
L081b	mericon® <i>Listeria monocytogenes</i> Pathogen Detection Assay	<i>Listeria monocytogenes</i>	Qiagen GmbH	AFNOR QIA 36/02 - 05/17	Meat and dairy products	N/A
L082	mericon® <i>Listeria species</i> Pathogen Detection Assay	<i>Listeria</i> spp.	Qiagen GmbH	AOAC-PTM # 061402	Uncooked hot dogs, deli turkey, smoked salmon, mung bean sprouts, pasteurized whole milk, environmental surfaces (stainless steel, ceramic tile, plastic, and sealed concrete), non-smoked gouda cheese, mozzarella cheese	N/A
L084a	Thermo Scientific™ SureTect™ <i>Listeria</i> species PCR Assay	<i>Listeria</i> spp.	OXOID Ltd, part of Thermo Fisher Scientific	AOAC-PTM # 071304	Raw ground beef, pork frankfurters, salami, ground pork, raw ground turkey, raw pork sausages, cooked sliced ham, cooked sliced turkey, pasteurized 2% milk, bagged lettuce, fresh bagged spinach, cantaloupe, processed cheese, smoked salmon, raw cod, cooked prawns, pasteurized brie cheese, ice cream, (sponge 4" x 4" enriched 225 mL of 24 LEB supplemented with 24 LEB selective supplement and 10 mL of LEB buffer supplement) stainless steel and plastic	25g except where noted in "Validated Matrices"
L084b	Thermo Scientific™ SureTect™ <i>Listeria</i> Species PCR Assay	<i>Listeria</i> spp.	OXOID Ltd, part of Thermo Fisher Scientific	AFNOR # UNI 03/09 - 11/13	All human food products and production environmental samples	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L086	DuPont™ BAX® System Real-Time PCR Assay for Genus <i>Listeria</i>	<i>Listeria</i> spp.	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 081401	Frankfurters (beef), cooked shrimp, bagged lettuce, queso fresco (Mexican style cheese), and environmental surfaces (stainless steel, plastic, and concrete)	25g
L087a	3M™ Molecular Detection Assay (MDA) <i>Listeria monocytogenes</i> Method	<i>Listeria monocytogenes</i>	3M Food Safety	AOAC-OMA # 2014.07	Beef hot dogs (25g and 125g), deli turkey (25g and 125g), cold smoked salmon, full-fat cottage cheese, chocolate milk, bagged raw spinach, romaine lettuce, whole cantaloupe melon, sealed concrete (sponge in 100mL and sponge in 225mL) and stainless steel (sponge in 225mL)	25g except where noted in "Validated Matrices"
L088	Atlas <i>Listeria</i> Environmental LE Detection Assay	<i>Listeria</i> spp.	Roka Bioscience, Inc	AOAC-PTM # 061503	Stainless steel, PVC, plastic, sealed concrete	N/A
L089	DuPont BAX System Real-Time PCR Assay for <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 121402	Beef frankfurters, bagged spinach, queso fresco, cooked shrimp, stainless steel, plastic & concrete	25g
L090a	ANSR for <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Neogen Corporation	AOAC-PTM # 061506	Hot dogs (125g), queso fresco, cantaloupe, guacamole, pasteurized liquid egg, sprout irrigation water (25mL), stainless steel	25g except where noted in "Validated Matrices"
L090b	ANSR for <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	NEOGEN Europe Ltd.	AFNOR # NEO 35/04 - 03/16	All human food products and production environmental	N/A
L091a	3M™ Molecular Detection Assay 2 (MDA2) - <i>Listeria</i> species	<i>Listeria</i> spp.	3M Company (3M Food Safety)	AOAC-PTM # 111501	Beef hot dogs, deli turkey (125g), raw chicken (leg pieces and fillets), cold smoked salmon, whole melon, romaine lettuce, queso fresco, vanilla ice cream, 4% milk fat cottage cheese, bagged raw spinach, sealed concrete (4"x 4" sponge enriched in 100mL), plastic (1" x 1" swab enriched in 10mL), stainless steel (4"x 4" sponge enriched in 225 mL)	25g except where noted in "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L091b	3M™ Molecular Detection Assay (MDA) 2 - <i>Listeria</i> Method	<i>Listeria</i> spp.	3M Food Safety	AOAC-OMA # 2016.07	hot dogs (25g, 125g), salmon, deli turkey (25g, 125g), cottage cheese, vanilla ice cream, queso fresco, spinach, melon (whole), raw chicken leg pieces, raw chicken fillet; concrete (3M™ Hydrated Sponge Stick with D/E, 225mL, 100mL), stainless steel (3M™ Hydrated Sponge Stick with D/E, 225mL), and plastic (3M™ EnviroSwab with Lethen, 10mL) environmental samples	25g except where noted in "Validated Matrices"
L091c	3M™ Molecular Detection Assay 2 - <i>Listeria</i>	<i>Listeria</i> spp.	3M Health Care	AFNOR # 3M 01/14 - 05/16	All human food products and production environmental samples	N/A
L092a	3M™ Molecular Detection Assay 2 (MDA2) - <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	3M Company (3M Food Safety)	AOAC-PTM # 081501	Beef hot dogs, deli turkey (125g), raw chicken (leg pieces and fillets), cold smoked salmon, whole melon, romaine lettuce, queso fresco, vanilla ice cream, 4% milk fat	25g except where noted in "Validated Matrices"
L092b	3M™ Molecular Detection Assay (MDA) 2 - <i>Listeria monocytogenes</i> Method	<i>Listeria monocytogenes</i>	3M Food Safety	AOAC-OMA # 2016.08	hot dogs (25g, 125g), salmon, deli turkey (25g, 125g), cottage cheese, chocolate milk, vanilla ice cream, queso fresco, romaine lettuce, melon	25g except where noted in "Validated Matrices"
L092c	3M™ Molecular Detection Assay 2 - <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	3M Health Care	AFNOR # 3M 01/15 - 09/16	All human food products and production environmental samples	N/A
L093	Veriflow™ <i>Listeria</i> spp.	<i>Listeria</i> spp.	Invisible Sentinel, Inc.	AOAC-PTM # 121302	Deli Turkey (125g), beef hot dogs, whey protein isolate, and environmental surfaces (1" x 1" swab or 4" x 4" sponge; stainless steel, ceramic tile, sealed concrete, plastic)	25g except where noted in "Validated Matrices"
L094	GeneQuence™ <i>Listeria monocytogenes</i> Test	<i>Listeria monocytogenes</i>	Neogen Corporation	AOAC-PTM # 120501	Deli turkey, deli ham, deli roast beef, hot dogs, raw ground beef, raw ground pork, smoked salmon, cooked crab meat, raw shrimp, ice cream, pasteurized milk, brie cheese, parmesan cheese, lettuce, frozen peas, and soy flour	25g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated Matrices	Validated Test Portion Size
L095	ANSR for <i>Listeria</i>	<i>Listeria</i> spp.	Neogen Europe Ltd.	AFNOR # NEO 35/05 - 07/16	All human food products and production environmental samples	N/A
L096	ANSR for <i>Listeria monocytogenes</i>	<i>Listeria monocytogenes</i>	Neogen Europe Ltd.	AFNOR # NEO 35/06 - 07/16	All human food products and production environmental samples	N/A
L097b	GENE-UP® <i>Listeria</i> spp.	<i>Listeria</i> spp.	bioMérieux	AFNOR # BIO 12/39 - 09/16	All human food products and production environmental samples	25g
L098	Xpress LM	<i>Listeria monocytogenes</i>	Crystal Diagnostics Corporate	AOAC-PTM # 071602	Stainless steel, plastic, ceramic tile	N/A
L099b	GENE-UP® <i>Listeria monocytogenes</i> 2 (LMO 2)	<i>Listeria monocytogenes</i>	bioMérieux	AFNOR # BIO 12/40 - 11/16	All human food products and production environmental samples	25g
L100	BACSpec <i>Listeria</i>	<i>Listeria</i> spp. (including <i>L. monocytogenes</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i> , <i>L. marthii</i> , <i>L. ivanovii</i> , <i>L. grayi</i> , <i>L. innocua</i> , and <i>L. recourtiae</i>)	Eurofins GeneScan	AOAC-PTM # 051703	Vegetable salad, frozen cantaloupe, soft white cheese, raw whole milk, frankfurter sausages, process water, smoked salmon, frozen cooked shrimp, stainless steel (1x1 in), sealed ceramic tile (4x4 in)	25g
L101	BACGene <i>Listeria</i> Multiplex	<i>Listeria monocytogenes</i> & <i>Listeria</i> spp.	Eurofins GeneScan GmbH	AFNOR # EGS 38/05 - 03/17	All human food products (by performing validation assays on a broad range of foods) and production environmental samples	25g
L102	BACGene <i>Listeria</i> Multiplex	<i>Listeria</i> spp. (including <i>L. monocytogenes</i> , <i>L. seeligeri</i> , <i>L. welshimeri</i> , <i>L. marthii</i> , <i>L. ivanovii</i> , <i>L. grayi</i> , <i>L. innocua</i> , and <i>L. recourtiae</i>) and <i>L. monocytogenes</i>	Eurofins GeneScan	AOAC-PTM # 061701	Mayonnaise-based vegetable salad, frankfurters, raw whole milk, soft white cheese (<i>Listeria</i> spp. only), frozen cantaloupe balls, smoked salmon, frozen cooked shrimp (<i>Listeria</i> spp. only), stainless steel 304L (1x1 in swab), ceramic tile (4x4 in sponge), and process water, ice cream with chocolate inclusions, plastic surface samples with sponge (with and without background flora of	25g
L103	BACGene <i>Listeria</i> spp.	<i>Listeria</i> spp.	Eurofins GeneScan GmbH	AFNOR # EGS 38/02 - 01/17	All human food products (by performing validation assays on a broad range of foods) and production environmental samples	25g

** N/A = Not available

Foodborne Pathogen Test Kits Validated by Independent Organizations

FSIS is making available a list of test kits that have been validated for detection of relevant foodborne pathogens (i.e., *Salmonella*, *Campylobacter*, *Listeria* spp. including *L. monocytogenes*, *E. coli* O157:H7 and non-O157 STEC). The list is intended to be informational and is not an endorsement or approval of any specific test kit, regardless of its inclusion in the list.

FSIS does not specifically endorse any of the mentioned test kits or products and acknowledges that equivalent test kits or products may be available for laboratory use. Likewise, FSIS does not require the use of any specific test kit, including those incorporated into FSIS's Microbiology Laboratory Guidebook methods. Instead, establishments and laboratories should choose test kits that are:

1) Validated for testing relevant foods by a:

- a) Recognized independent body (i.e., AOAC, AFNOR, MicroVal, NordVal),
- b) U.S. regulatory body (i.e., FSIS MLG or FDA BAM), or
- c) International Organization for Standardization (ISO) process

2) In addition, the validated method should be:

- a) Fit for the intended purpose and application (e.g., validated for the appropriate matrix and sample size to detect the appropriate foodborne pathogen), and
- b) Performed per the conditions of the validated protocol by a laboratory that assures the quality of the analytical results.

The table below contains a list of foodborne pathogen test kits that are validated by recognized independent organizations (i.e., AOAC, AFNOR, MicroVal, NordVal) and therefore meet criterion 1a above. However, the test kits in this list are not necessarily equivalent or appropriate for all testing applications.

FSIS intends to update validated test kit lists on a quarterly basis.

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
EC003	Assurance GDS for <i>E. coli</i> O157:H7	<i>E. coli</i> O157:H7	BioControl Systems	AOAC-OMA # 2005.04	Raw ground beef, beef trim, orange juice, apple juice, fresh vegetables, and sprout process water	25g
EC004	Assurance GDS Shigatoxin Genes	<i>E. coli</i> O157:H7 and <i>E. coli</i> O157:H7 nonmotile (NM)	BioControl Systems	AOAC-OMA # 2005.05	Raw ground beef, beef trim, orange juice, apple juice, fresh vegetables, and sprout process water	25g
EC005	Assurance® Enzyme Immunoassay (EIA)	<i>E. coli</i> O157:H7 (EHEC)	BioControl Systems	AOAC-OMA # 996.10	Dairy foods, meats, poultry products, fruits, nutmeats, seafood, pasta, liquid eggs, raw and cooked beef	25g
EC006a	BAX® Real-Time PCR Assay <i>E. coli</i> O157:H7	<i>E. coli</i> O157	DuPont Qualicon (DuPont Nutrition & Health Diagnostics)	AFNOR # QUA 18/07 - 07/10	Raw beef and raw vegetables	25g
EC006b	DuPont™ BAX® System Real-Time PCR Assay for <i>E. coli</i> O157:H7	<i>E. coli</i> O157:H7	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 031002	Lettuce & spinach; Beef trim (375 g) & ground beef (65 g)	25g except where noted in
EC007a	BAX® System <i>E. coli</i> O157:H7 MP	<i>E. coli</i> O157	DuPont Qualicon (DuPont Nutrition & Health Diagnostics)	AFNOR # QUA 18/04 - 03/08	Raw beef meat, raw milk, fruits, vegetables, Ready-to-Eat meals, raw pork meat, raw ovine meat, and raw chicken meat	25g
EC007b	DuPont™ BAX® System PCR Assay for <i>E. coli</i> O157:H7 MP and the BAX® System MP Media	<i>E. coli</i> O157:H7	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 050501	Raw ground beef (25g, 65 g), beef trim (65g, 325g, 375g), spinach & lettuce (25 g) red	25g except where noted in "Validated
EC010	BBL™ CHROMagar™ O157	<i>E. coli</i> O157:H7	Becton Dickinson and Company	AOAC-PTM # 090501	Raw ground beef, unpasteurized apple cider	N/A

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
EC011	Duopath® STEC (formerly Duopath® Verotoxin)	stx1/st2 producing <i>E. coli</i>	Merck KGaA	AOAC-PTM # 020402	Pure culture	N/A
EC012	Hygiena Lateral Flow System <i>E. coli</i> O157	<i>E. coli</i> O157	Qualicon Diagnostics LLC, a Hygiena Company	AOAC-PTM # 010601	Boneless beef, ground beef, apple cider	25g
EC015b	foodproof® <i>E. coli</i> O157 Detection Kit, Hybridization Probes and foodproof® <i>E. coli</i> O157 Detection Kit, 5'Nuclease in combination with foodproof® ShortPrep II Kit	<i>E. coli</i> O157	BIOTECON Diagnostics GmbH	AOAC-PTM # 100601	Camembert cheese, egg salad, raw milk, mayonnaise, hamburger meat, brockwurst sausage, coalfish, fresh salmon, apple juice, raw vegetables	25g
EC016a	GeneDisc® <i>E. coli</i> O157:H7	<i>E. coli</i> O157	Pall GeneDisc Technologies	AFNOR # GEN 25/06 - 11/08	Raw beef meats (including frozen, seasoned), dairy products and vegetables	25g
EC016b	GeneDisc® Plate Pathogenic <i>E. coli</i> O157	<i>E. coli</i> O157	Pall GeneDisc Technologies	AOAC-PTM # 021102	Fresh raw ground beef and fresh raw beef trim	25g, 375g
EC017	GeneDisc® Plate Pathogenic <i>E. coli</i> O157 & <i>Salmonella</i>	<i>E. coli</i> O157 & <i>Salmonella</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 021104	Fresh raw ground beef, fresh raw beef trim	25g, 375g
EC019	IEH <i>E. coli</i> O157, Stx-producing <i>E. coli</i> (STEC) with Intimin and <i>Salmonella</i> Test System	<i>E. coli</i> O157, Stx-producing <i>E. coli</i> (STEC) with intimin & <i>Salmonella</i> ** <i>E. coli</i> O26, O45, O103, O111, O121 & O145	IEH Laboratories & Consulting Group	AOAC-PTM # 100701	Raw ground beef (25 g, 375 g), raw beef trim (25 g, 375 g), raw poultry, RTE turkey & mixed leafy greens, (125g)	25g except where noted in "Validated Matrices"
EC020a	iQ-Check™ <i>E. coli</i> O157:H7 Real Time PCR	<i>E. coli</i> O157:H7	Bio-Rad Laboratories	AOAC-PTM # 020801	Ground beef, apple cider, fresh spinach (25 g), raw ground beef (83% lean), raw beef trim, fresh spinach (375 g), raw chicken breast without skin, raw chicken thigh with skin, mechanically separated chicken, raw ground pork (25 g)	25g except where noted in "Validated Matrices"
EC020b	iQ-Check™ <i>E. coli</i> O157:H7 Kit	<i>E. coli</i> O157	BIO-RAD	AFNOR # BRD 07/15 - 06/08	Raw beef	25g
EC021b	MicroSEQ® <i>E. coli</i> O157:H7 Detection Kit	<i>E. coli</i> O157:H7	Life Technologies	AOAC-PTM # 071001	Raw ground beef & raw beef trim (25 g, 375 g); spinach, orange juice, apple juice	25g except where noted in "Validated Matrices"
EC022b	3M Molecular Detection Assay <i>E. coli</i> O157 (including H7)	<i>E. coli</i> O157	3M Health Care	AFNOR # 3M 01/12 - 03/13	Raw beef meats, raw dairy products, raw fruits and	25g
EC023	PATHATRIX Pooling System for <i>E. coli</i> O157 spp.	<i>E. coli</i> O157 (including H7)	Life Technologies (Thermo Scientific)	AOAC-PTM # 030202	Raw ground beef	25g
EC024	RapidChek® <i>E. coli</i> O157 (including H7) Lateral Flow Test Assay	<i>E. coli</i> O157	Romer Labs Technology, Inc.	AOAC-PTM # 070801	Raw ground beef & boneless beef trim	25g, 375g
EC025a	RAPID® <i>E. coli</i> O157:H7	<i>E. coli</i> O157:H7	Bio-Rad Laboratories	AOAC-PTM # 060701	Raw ground beef and fresh spinach	Sample preparation, enrichment, and IMS as per FSIS ML G.Ch. 5
EC025b	RAPID® <i>E. coli</i> O157:H7/Agar	<i>E. coli</i> O157:H7	BIO-RAD	AFNOR # BRD 07/14 - 09/07	Meat products, dairy products, fruits and vegetables, composite foods	25g/25mL

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
EC026a	Reveal for <i>E. coli</i> O157:H7 Test in Selected Foods and Environmental Swabs	<i>E. coli</i> O157:H7	Neogen Corporation	AOAC-OMA # 2000.14	Raw ground beef, raw beef cubes, apple cider, iceberg lettuce rinse, environmental swabs of stainless steel	25g, 375g (20hr enrichments)
EC026b	Reveal for <i>E. coli</i> O157:H7 Test System in Selected Foods	<i>E. coli</i> O157:H7	Neogen Corporation	AOAC-OMA # 2000.13	Raw ground beef, raw beef cubes, iceberg lettuce rinse	25g (8hr enrichments), 375g (12hr enrichments)
EC027	Reveal® 2.0 <i>E. coli</i> O157:H7 Test System	<i>Escherichia coli</i> serotypes O157:H7 & O157:NM	Neogen Corporation	AOAC-PTM # 011103	Raw beef trim, raw ground beef	65g, 375g
EC029	Singlepath® <i>E. coli</i> O157	<i>E. coli</i> O157 (including H7)	Merck KGaA	AOAC-PTM # 010407	Raw ground beef & pasteurized milk	25g
EC031a	VIDAS® UP <i>E. coli</i> O157 (including H7) (ECPT)	<i>E. coli</i> O157:H7	bioMérieux, sa	AOAC-PTM # 060903	Ground beef, beef trimmings (with sample sizes: 25 g, 75 g & 375 g composite & wet pooled samples 75 g & 375 g), bagged lettuce, fresh spinach & irrigation water	25g except where noted in "Validated Matrices"
EC031b	VIDAS® UP <i>E. coli</i> O157 including H7 (VIDAS ECPT)	<i>E. coli</i> O157	bioMérieux	AFNOR # BIO 12/25 - 05/09	Raw meat products, raw milk and raw milk products, raw vegetables, and environmental samples	25g
EC032	Visual Immunoprecipitate Assay (VIP®) Assay	<i>E. coli</i> O157:H7	BioControl Systems	AOAC-OMA # 996.09	Dairy products, meats, poultry, fruits, nutmeats, seafood, pasta, liquid eggs, vegetables, raw beef, cooked beef	25g
EC033	Crystal Diagnostics MultiPath System™ E	<i>E. coli</i> O157	Crystal Diagnostics Corporation	AOAC-PTM # 041301	Raw ground beef (375 g), fresh raw spinach (200 g)	See "Validated Matrices"
EC034	GeneDisc® Plate STEC	Shigatoxigenic <i>E. coli</i>	Pall GeneDisc Technologies	AOAC-PTM # 021103	Fresh raw ground beef, fresh raw beef trim	25g, 375g
EC035	iQ-Check™ STEC VirX and SerO Real-Time PCR	<i>Stx1</i> , <i>Stx2</i> , <i>eae</i> , O26, O45, O103, O11, O121, O145, O157:H7, and STEC	Bio-Rad Laboratories	AOAC-PTM # 121203	Raw beef trim, ground beef, fresh spinach	25g
EC036	GeneDisc® Plate STEC & <i>Salmonella</i> spp.	Shigatoxigenic <i>E. coli</i> and <i>Salmonella</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 021105	Fresh raw ground beef, fresh raw beef trim	25g, 375g
EC037	Atlas® <i>E. coli</i> O157:H7 EG2 Detection Assay	<i>E. coli</i> O157:H7	ROKA Bioscience, Inc	AOAC-PTM # 011401	Fresh raw ground beef (73% lean, 375 g), fresh raw beef trim (65 g), romaine lettuce (375 g)	See "Validated Matrices"
EC038	Atlas® STEC EG2 Combo Detection Assay	<i>E. coli</i> O157:H7 & non-O157 STEC	ROKA Bioscience, Inc	AOAC-PTM # 011402	Fresh raw ground beef (73% lean), fresh raw beef trim, romaine lettuce	375g
EC039	InstantLabs <i>E. coli</i> O157 (including H7) Food Safety Kit	<i>E. coli</i> O157 (including H7)	InstantLabs	AOAC-PTM # 011403	Fresh raw ground beef (27% fat, 375g), fresh raw beef trim (375g), fresh raw ground chicken, romaine lettuce, pasteurized apple juice	25g except where noted in "Validated Matrices"
EC040	GeneDisc® Plate STEC Top 7	<i>E. coli</i> O157:H7 & non-O157 STEC	Pall GeneDisc Technologies	AOAC-PTM # 031401	Fresh raw ground beef, fresh raw beef trim	375g

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
EC041	Actero™ <i>Salmonella</i> /STEC Enrichment Media	<i>Salmonella</i> spp./STEC (including O26, O45, O13, O111, O121, O145 & O157)	FoodChek System Inc.	AOAC-PTM # 041403	Raw ground beef	Contact Manufacturer
EC042	NH Immunochromato O157 Test Kit	<i>E. coli</i> O157	NH Foods Ltd.	AOAC-PTM # 091403	Fresh ground beef (15% fat)	25g
EC043a	Thermo Scientific™ SureTect™ <i>Escherichia coli</i> O157:H7 PCR Assay	<i>E. coli</i> O157:H7	Oxoid Ltd. Part of Thermo Fisher Scientific	AOAC-PTM # 021501	Raw ground beef (375 g, 1:4 and 1:5 ratios); raw beef trim (375 g, 1:4 and 1:5 ratios); bagged spinach, (1:10 ratio) 25 g and apple juice	25g except where noted in "Validated Matrices"
EC043b	Thermo Scientific™ SureTect™ <i>Escherichia coli</i> O157:H7 PCR Assay	<i>Escherichia coli</i> O157:H7	OXOID Ltd., part of Thermo Fisher Scientific	AFNOR # UNI 03/10 - 03/15	raw beef meats	25g
EC046	mericon® <i>E. coli</i> O157 Screen PLUS	<i>E. coli</i> O157 (<i>stx1</i> , <i>stx2</i> , <i>eae</i> and O157)	Qiagen GmbH	AOAC-PTM # 101503	Raw ground beef (70% lean, 325 g), raw beef trim (325 g), fresh spinach (25 g)	See "Validated Matrices"
EC047	ANSR for <i>E. coli</i> O157:H7	<i>E. coli</i> O157:H7	Neogen Corporation	AOAC-PTM # 111502	Ground beef (80% lean, 325 g), beef trim (~20% fat, 375 g and 325 g), spinach (200 g), sprout irrigation water (125 ml)	See "Validated Matrices"
EC048	Solus <i>E. coli</i> O157 ELISA	<i>E. coli</i> O157	Solus Scientific (part of PerkinElmer, Inc.)	AFNOR # SOL 37/03 -10/15	Raw beef meat products (seasoned or not), raw milks and dairy products, vegetables, and production environmental samples	N/A
EC049	Veriflow O157:H7	<i>E. coli</i> O157:H7	Invisible Sentinel, Inc.	AOAC-PTM # 121401	20% fat raw ground beef, raw spinach, and 2% fat milk, whey protein powder (25g), 20% raw ground beef (375g)	Contact Manufacturer
EC050	PhageDX <i>E. coli</i> O157:H7 Assay	<i>E. coli</i> O157:H7	Laboratory Corporation of America	AOAC-PTM # 081601	Fresh raw ground beef, 80% lean, fresh raw ground beef 70% lean, raw beef trim, containing >30% fat content (375g)	25g
EC052	Assurance® GDS for <i>E. coli</i> O157:H7 Tq Detection Kit	<i>Escherichia coli</i> O157:H7	BioControl Systems, Inc	MicroVal # 2015LR49	Raw beef meats (25 g, 375 g), dairy products (25 g), fruits and vegetables (25 g), environmental samples (25 g or surface sample)	See "Validated Matrices"
EC053	Veriflow® STEC	<i>Escherichia coli</i> with <i>stx1</i> or <i>stx2</i> and <i>eae</i>	Invisible Sentinel Inc.	AOAC-PTM # 111601	Raw beef trim	375g
EC054	3M Molecular Detection Assay 2 - <i>E. coli</i> O157 (including H7)	<i>E. coli</i> O157	3M Health Care	AFNOR # 3M 01/18 - 05/17	Raw beef meats, raw dairy products, raw fruits and vegetables	25g
EC055	3M™ Molecular Detection Assay (MDA) 2— <i>E. coli</i> O157 (Including H7)	<i>Escherichia coli</i> O157:H7	3M Food Safety	AOAC-OMA # 2017.01	Raw ground beef (73% lean), frozen blueberries, fresh bean sprouts, and fresh baby spinach	25g
EC056	QIAGEN mericon® <i>E. coli</i> O157 Screen Plus and mericon® <i>E. coli</i> STEC O-Type Pathogen Detection Assays	<i>Escherichia coli</i> O157:H7 and <i>Escherichia coli</i> non-O157 STEC	Qiagen Germantown, MD	AOAC-OMA # 2017.05	Fresh spinach (25 g), raw ground beef (70% lean) (325 g), raw beef trim (325 g)	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
EC057	GENE-UP® <i>E. coli</i> O157:H7 2 (ECO 2)	<i>Escherichia coli</i> O157:H7	bioMérieux	MicroVal # 2015LR59	Fresh and frozen raw meats, cured and fermented meats, vegetables, raw dairy products using a specific protocol and raw meats (except poultry) using a short protocol (25 g and 375 g sample size), and production environmental samples	See "Validated Matrices"
EC058	VereBeef™ Detection Kit	(8-20 hr) <i>Escherichia coli</i> O157:H7, STEC virulence factors (<i>Stx1A</i> or <i>Stx2A</i> and <i>eae</i>) (10-20 hr) <i>Escherichia coli</i> O26, O45, O103, O111, O121, O145, <i>Salmonella</i> spp.	Veredus Laboratories Pte, Ltd.	AOAC-PTM # 011801	Raw beef trim 25 g, 325 g, 375 g	See "Validated Matrices"
EC059	PolySkoPe 1.0 Multiplex Detection Assay	STECs, <i>E. coli</i> O157:H7 & Non-O157 STEC Big 6 (O26, O45, O103, O111, O121, O145), <i>Listeria monocytogenes</i> , <i>Salmonella</i> species	PolySkoPe Labs	AOAC-PTM # 041801	(25g) Fresh raw ground beef (73% lean), deli turkey, fresh baby spinach, stainless steel (4x4 in sponge)	See "Validated Matrices"
EC060	GENE-UP® <i>E. coli</i> O157:H7 2 (ECO 2)	<i>E. coli</i> O157:H7	bioMérieux, s.a.	AOAC-PTM # 121805	Ground beef (25 g, 375 g), raw spinach (200 g), beef trim (375 g), raw ground pork (375 g), raw ground chicken (25 g)	See "Validated Matrices"
EC061	GENE-UP® <i>E. coli</i> O157:H7 2 (ECO 2)	<i>E. coli</i> O157:H7	bioMérieux, s.a.	AOAC-OMA # 2019.03	Raw ground beef (73% lean; 25 g and 375 g), fresh spinach (200 g), raw milk cheese (25 g), raw ground chicken (25 g), raw beef trim (25 g and 375 g), raw ground pork (375 g), Romaine lettuce (375 g), raw sausage (25 g), raw milk (25 g), raw ground veal, (25 and 375 g) and process water (25 g)	See "Validated Matrices"
EC062	NeoSeek™ STEC	EHEC <i>Escherichia coli</i> O157 and O26, O45, O103, O111, O121, O145	Neogen Corporation	AOAC-PTM # 081901	Raw beef trim, pure bacterial cultures	Contact Manufacturer
EC063	Assurance® GDS EHEC ID for <i>E. coli</i> O157:H7 Tq	<i>Escherichia coli</i> O157:H7, <i>E. coli</i> O157:NM	BioControl Systems, Inc. / MilliporeSigma	AOAC-PTM # 101901	Raw ground beef (375 g, ~85% lean), raw beef trim (375 g, ~85% lean), frozen finely textured beef (375 g, 97% lean), carcass cloths	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
EC064	BACGene <i>E. coli</i> O157:H7	<i>E. coli</i> O157:H7	Eurofins GeneScan Technologies, GmbH	AOAC-PTM # 022002	Fresh raw ground beef (375 g), fresh raw beef trim (375 g), beef carcass sampling cloth (4" x 4"), romaine lettuce (375 g), all-purpose flour (25 g), stainless steel (4" x 4", 18-gauge 300 series, brush finish, NSF-certified), unpolished ceramic tile (1" x 1")	See "Validated Matrices"
EC065	BACGene <i>E. coli</i> O157:H7	<i>E. coli</i> O157:H7	Eurofins GeneScan Technologies, GmbH	AFNOR # EGS 38/06 - 11/19	Raw meat, ready-to-eat and ready-to-reheat meat (except poultry), raw milk and raw milk based products, fresh produce and fruits	25g
EC066	BAX System Real-Time PCR Assays for STEC Suite and BAX System Real-Time PCR Assays for <i>E. coli</i> O157:H7	<i>Shiga toxin-producing Escherichia coli</i> (O26, O103, O111, O145, O121 and O157:H7) serogroups	Qualicon Diagnostics LLC.	AFNOR # QUA 18/11 - 12/20	Raw beef meat, raw dairy products and vegetables products	25g
EC067	GENE-UP® EHEC Detection Method	<i>E. coli</i> (O26, O45, O103, O111, O121, O145, O157)	bioMérieux Inc.	AOAC-OMA # 2020.06	Raw beef trim, raw ground beef (73 and 80% lean), raw veal, raw milk, and raw milk cheese; 200 g test portions of spinach; 375 g test portions of raw ground beef (73% lean), raw beef trim, and Romaine lettuce	25g except where noted in "Validated Matrices"
EC068	BAX System Real-Time PCR Assay for <i>E. coli</i> O157:H7 Exact	<i>E. coli</i> O157:H7	Hygiena	AOAC-PTM # 102003	Fresh raw ground beef (25 and 375 g, 73% lean), fresh raw beef trim (325 and 375 g), leafy greens (375 g), raw fluid milk (25 g)	See "Validated Matrices"

** N/A = Not available

Foodborne Pathogen Test Kits Validated by Independent Organizations

FSIS is making available a list of test kits that have been validated for detection of relevant foodborne pathogens (i.e., *Salmonella*, *Campylobacter*, *Listeria* spp. including *L. monocytogenes*, *E. coli* O157:H7 and non-O157 STEC). The list is intended to be informational and is not an endorsement or approval of any specific test kit, regardless of its inclusion in the list.

FSIS does not specifically endorse any of the mentioned test kits or products and acknowledges that equivalent test kits or products may be available for laboratory use. Likewise, FSIS does not require the use of any specific test kit, including those incorporated into FSIS's Microbiology Laboratory Guidebook methods. Instead, establishments and laboratories should choose test kits that are:

1) Validated for testing relevant foods by a:

- a) Recognized independent body (i.e., AOAC, AFNOR, MicroVal, NordVal),
- b) U.S. regulatory body (i.e., FSIS MLG or FDA BAM), or
- c) International Organization for Standardization (ISO) process

2) In addition, the validated method should be:

- a) Fit for the intended purpose and application (e.g., validated for the appropriate matrix and sample size to detect the appropriate foodborne pathogen), and
- b) Performed per the conditions of the validated protocol by a laboratory that assures the quality of the analytical results.

The table below contains a list of foodborne pathogen test kits that are validated by recognized independent organizations (i.e., AOAC, AFNOR, MicroVal, NordVal) and therefore meet criterion 1a above. However, the test kits in this list are not necessarily equivalent or appropriate for all testing applications.

FSIS intends to update validated test kit lists on a quarterly basis.

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
STEC001	GeneDisc® Plate STEC	Shigatoxigenic <i>Escherichia coli</i>	Pall GeneDisc Technologies	AOAC-PTM # 021103	Fresh ground beef (25 g, 375 g), fresh beef trim (25 g, 375 g)	See "Validated Matrices"
STEC003	IQ-Check® STEC VirX and SerO Real-Time PCR	Stx1, Stx2, eae, O26, O45, O103, O11, O121, O145, O157:H7, and STEC	Bio-Rad Laboratories	AOAC-PTM # 121203	Raw beef trim, raw ground beef, fresh spinach	375g
STEC004	GeneDisc® Plate STEC & <i>Salmonella</i> spp.	Shigatoxigenic <i>E. coli</i> and <i>Salmonella</i> spp.	Pall GeneDisc Technologies	AOAC-PTM # 021105	Fresh raw ground beef, fresh raw beef trim	25g, 375g
STEC005	IEH <i>E. coli</i> O157, Stx-producing <i>E. coli</i> (STEC) with Intimin and <i>Salmonella</i> Test System	<i>E. coli</i> O157, Stx-producing <i>E. coli</i> (STEC) with intimin & <i>Salmonella</i> ** <i>E. coli</i> O26, O45, O103, O111, O121 & O145	IEH Laboratories & Consulting Group	AOAC-PTM # 100701	Raw ground beef (25 g, 375 g), raw beef trim (25 g, 375 g), raw poultry (25 g, 375 g), RTE turkey & mixed leafy greens (25g, 125g)	25 g except where noted in "Validated Matrices"
STEC006	DuPont™ BAX® System Real-Time PCR Assay Suite for STEC	STEC Shiga Toxin producing <i>E. coli</i> O26, O111, O121, O45, O103, O145	Hygiena	AOAC-PTM # 091301	Raw beef trim (375 g), raw ground beef (325 g, 375 g), raw ground beef plus soy (325 g), raw ground beef (25 g), and all-purpose flour (25 g)	See "Validated Matrices"
STEC007	Assurance GDS® for MPX Top 7 STEC	STECs including: O26, O45, O103, O111, O121, O145, & O157	BioControl Systems, Inc.	AOAC-PTM # 071301	Raw beef trim (375 g), raw ground beef (375 g), spinach (375 g), leafy greens and spinach (25 g), stainless steel (4" x 4" sponge)	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
STEC008	Atlas® STEC EG2 Combo Detection Assay	<i>E. coli</i> O157:H7 & non-O157 STEC	ROKA Bioscience, Inc	AOAC-PTM # 011402	Fresh raw ground beef (73% lean, 375 g), fresh raw beef trim,(375 g), romaine lettuce, (375 g)	See "Validated Matrices"
STEC009	GeneDisc® Plate STEC Top 7	<i>Escherichia coli</i> O157:H7, O26, O45, O103, O111, O121, O145	Pall GeneDisc Technologies	AOAC-PTM # 031401	Fresh raw ground beef (20% fat, 375 g), fresh raw beef trim (20% fat, 375 g)	See "Validated Matrices"
STEC010	Actero™ <i>Salmonella</i> /STEC Enrichment Media	<i>Salmonella</i> spp./STEC (including O26, O45, O13, O111, O121, O145 & O157)	FoodChek System Inc.	AOAC-PTM # 041403	Raw ground beef (25, 325 g), raw ground chicken (25 g), chicken carcass rinse, dried whole egg (100 g) whole liquid egg (100 g), raw frozen scallops (25 g), sprouts (25 g),raw almonds (375 g), peanut butter (25 g), dried parsley (25 g), whole black pepper (25 g), dried raisins (25 g) and Environmental surfaces: stainless steel (1x1 in), plastic, rubber (1x1 in), ceramic tiles (1x1 in), sealed concrete (1x1 in), dry pet food (25, 275 g), milk chocolate (25 g), chocolate liquor (25 g), cocoa powder (25 g), shell egg	See "Validated Matrices"
STEC011	Assurance GDS® Top 7 STEC (<i>eae</i>) Tq with Assurance GDS® Shiga Toxin Genes (Top 7) Tq	Top 7 Shiga toxin-producing <i>Escherichia coli</i> (STEC) serotypes O26, O45, O103, O111, O121, O145, and O157	BioControl Systems, Inc.	AOAC-PTM # 071303	Raw beef trim, raw ground beef (375 g), mixed greens and spinach (25 g)	Contact Manufacturer
STEC012	Xpress E7 STEC	<i>E. coli</i> serogroups O26, O45, O103, O111, O121, O145, and O157	Crystal Diagnostics Corporate	AOAC-PTM # 011502	Raw ground beef and beef trim (325 g), Spinach (200 g)	See "Validated Matrices"
STEC014	Assurance GDS® MPX ID for Top STEC (MPX ID)	Top 6 Shiga toxin-producing <i>Escherichia coli</i> (STEC) serotypes O26, O45, O103, O111, O121, O145	BioControl Systems, Inc.	AOAC-PTM # 101502	Raw ground beef 20% fat (375 g), raw beef trim 45% fat (375 g), raw spinach (375 g), stainless steel (4"x4" sponge)	See "Validated Matrices"
STEC015	mericon® <i>E. coli</i> STEC O-type Pathogen Detection Assay	<i>E. coli</i> non-O157 STECs (O26, O45, O103, O111, O121, O145)	Qiagen GmbH	AOAC-PTM # 101504	Raw ground beef (70% lean, 325 g), raw beef trim (325 g), fresh spinach (25 g)	See "Validated Matrices"
STEC016	Duopath® STEC (formerly Duopath® Verotoxin)	Stx1/Stx2 producing <i>E. coli</i>	Merck KGaA	AOAC-PTM # 020402	Pure culture	N/A
STEC017	Applied BioSystems™ RapidFinder™ STEC Detection Workflow	<i>E. coli</i> O157:H7 and "Big Six" non- <i>E. coli</i> STEC serotypes (O26, O45, O103, O111, O121, O145)	Thermo Fisher Scientific	AOAC-PTM # 061602	Fresh raw ground beef (73% lean, 375 g), fresh raw beef trim (375 g)	See "Validated Matrices"
STEC019	Veriflow® STEC	<i>Escherichia coli</i> with Stx1 or Stx2 and <i>eae</i>	Invisible Sentinel Inc.	AOAC-PTM # 111601	Raw beef trim	375g
STEC020	QIAGEN mericon® <i>E. coli</i> O157 Screen Plus and mericon® <i>E. coli</i> STEC O-Type Pathogen Detection Assays	<i>Escherichia coli</i> O157:H7 and <i>Escherichia coli</i> non-O157 STEC	Qiagen Germantown, MD	AOAC-OMA # 2017.05	Fresh spinach (25 g), raw ground beef (70% lean; 325 g), raw beef trim (325 g)	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
STEC021	VereBeef™ Detection Kit	(8-20 hr) <i>Escherichia coli</i> O157:H7, STEC virulence factors (Stx1A or Stx2A and eae) (10-20 hr) <i>Escherichia coli</i> O26, O45, O103, O111, O121, O145, <i>Salmonella</i> spp.	Veredus Laboratories Pte, Ltd.	AOAC-PTM # 011801	Raw beef trim 25 g, 325 g, 375 g	See "Validated Matrices"
STEC022	PDX-STEC	Shiga toxin-producing <i>E. coli</i> (STEC), <i>Salmonella</i> spp.	Paradigm Diagnostics, Inc.	AOAC-PTM # 101705	Raw ground beef	325g
STEC023	PolySkoPe 1.0 Multiplex Detection Assay	STECs, <i>E. coli</i> O157:H7 & Non-O157 STEC Big 6 (O26, O45, O103, O111, O121, O145), <i>Listeria monocytogenes</i> , <i>Salmonella</i> spp.	PolySkoPe Labs	AOAC-PTM # 041801	(25 g) Fresh raw ground beef (73% lean), deli turkey, fresh baby spinach, stainless steel (4x4 in sponge)	See "Validated Matrices"
STEC024	GENE-UP® EHEC Series (EH1, EH2, ECO 2) - (formerly GENE-UP® EHEC Series PTM 031701)	<i>Escherichia coli</i> O157:H7 & non-O157 STEC Top 6	bioMérieux, s.a.	AOAC-PTM # 121806	Raw beef trim (375 g with enrichment 10-24h), raw ground beef (25 g with enrichment 8-24h and 375 g with enrichment 10-24h), spinach (200 g with enrichment 10-24h), spinach (200 g)	See "Validated Matrices"
STEC025	NeoSeek™ STEC	EHEC <i>Escherichia coli</i> O157 and O26, O45, O103, O111, O121, O145	Neogen Corporation	AOAC-PTM # 081901	Raw beef trim, pure bacterial cultures	Contact Manufacturer
STEC026	GeneDisc® STEC	Shiga toxin-producing <i>Escherichia coli</i> (O26, O103, O111, O145, O157)	Pall GeneDisc Technologies	AFNOR # GEN 25/09 - 03/19	Raw beef meat, raw dairy products and vegetables	25g
STEC027	3M™ Molecular Detection Assay 2 - STEC Gene Screen	STEC/Shiga-toxin producing enterohemorrhagic <i>E. coli</i> (<i>E. coli</i> strains containing <i>Escherichia coli</i> genes <i>stx1</i> (codes for Shiga toxin type 1) and/or <i>stx2</i> (codes for Shiga toxin type 2), and <i>eae</i> gene (codes for intimin))	3M Food Safety	AOAC-PTM # 071902	Fresh raw beef trim (375 g, ~75% lean) fresh raw ground beef (375 g, ~73% lean), fresh raw spinach (200 g), fresh raw ground beef (25 g, ~75% lean), fresh raw ground pork (375 g, ~70% lean), fresh raw poultry parts (375 g), sprouts (25 g)	See "Validated Matrices"
STEC028	3M™ Molecular Detection Assay 2 - STEC Gene Screen	STEC/Shiga-toxin producing enterohemorrhagic <i>E. coli</i> (<i>E. coli</i> strains containing <i>Escherichia coli</i> genes <i>stx1</i> - codes for Shiga-toxin type 1) and/or <i>stx2</i> (codes for Shiga-toxin type 2))	3M Food Safety	AOAC-PTM # 071903	Fresh raw ground beef (375 g, ~73% lean), fresh raw spinach (200 g), fresh raw ground beef (25 g, ~75% lean), fresh raw beef trim (25 g, ~75% lean), fresh raw ground pork (375 g, ~70% lean), fresh raw poultry parts (375 g), sprouts (25 g)	See "Validated Matrices"

** N/A = Not available

#	Method Name	Target Organism(s)	Manufacturer	External Validation	Validated matrices	Validated Test Portion Size
STEC029	BACGene STEC Top7 Workflow	STEC Top 7 (<i>Escherichia coli</i> O157:H7 & non-O157 STEC <i>E. coli</i> O26, O45, O103, O111, O121, O145)	Eurofins GeneScan Technologies, GmbH	AOAC-PTM # 022003	Fresh raw ground beef (375 g), fresh raw beef trim (375 g), beef carcass sampling cloth (4" x 4" cloth), romaine lettuce (375 g), all-purpose flour (25 g), stainless steel (4" x 4")	See "Validated Matrices"
STEC030	SUPREME Real Time Detection Kit <i>E. coli</i>	(EPEC) <i>E. coli</i> O157, <i>E. coli</i> O111, O26, O103, O145 serotypes containing stx1 and/or stx2 and eae genes (STEC)	BPMR - Producao e Desenvolvimento, Lda	AOAC-PTM # 081902	Raw ground beef, cream cheese, mixed lettuce, can orange juice	25g
STEC031	Thermo Scientific™ SureTect™ STEC Screening PCR Assay and Thermo Scientific™ SureTect™ STEC Identification	<i>Shiga toxin-producing Escherichia coli</i> (O26, O103, O111, O145, O157) serogroups	Oxoid Ltd. Thermo Fisher Scientific	AFNOR # UNI 03/13 - 10/20	Raw meats (including poultry meats), dairy products and vegetables including fruits	25g
STEC032	BAX System Real-Time PCR Assays for STEC Suite and BAX System Real-Time PCR Assays for <i>E. coli</i> O157:H7	<i>Shiga toxin-producing Escherichia coli</i> (O26, O103, O111, O145, O121 and O157:H7) serogroups	Qualicon Diagnostics LLC.	AFNOR # QUA 18/11 - 12/20	Raw beef meat, raw dairy products and vegetables products	25g
STEC033	GENE-UP® EHEC □	STEC	bioMérieux	MicroVal # 2018LR84	Raw meat, except poultry (25g and 375g), raw milk, and raw milk cheeses and production environmental samples	See "Validated Matrices"

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