

# Quality Control Solutions Food Testing



## **QUALITY CONTROL SOLUTIONS FOR FOOD TESTING**

ATCC® offers an expanding portfolio of quality control products to ensure the accuracy and reliability of your food safety programs. Through the development of customer-driven products, ATCC is making it easier for food manufacturers, processors, and contract testing laboratories to ensure the safety of consumable goods in accordance with FDA, the Food Safety Modernization Act, and food testing accreditation. Choose from among a variety of ATCC Quality Control Solutions, including:

- ATCC Reference Strains including those cited in published laboratory methods
- ATCC Genuine Nucleics supporting the development and validation of rapid microbial methods
- ATCC Reporter-labeled Strains including the USDA-cited GFP-labeled Escherichia coli 0157

Trust ATCC Quality Control Solutions for accuracy, reliability, and the reproducibility needed to maintain outstanding food safety programs!









#### ATCC FOOD TESTING REFERENCE STRAINS

The validity of any microbial-based assay is dependent upon minimally passaged, fully characterized control organisms. One of our top priorities at ATCC is to provide high-quality reference strains for use in the routine testing of food products. Each ATCC reference strain is backed by meticulous laboratory procedures that ensure viability, identity, functionality, and purity, not only for our master seed stocks, but also for every distribution lot that we ship to your lab.

ATCC reference strains are frequently cited in published laboratory methods used by industry (see page 6 for details), and include a variety of cultures frequently associated with foodborne illness, such as:

- Campylobacter spp.
- Escherichia coli
- Listeria monocytogenes
- Chronobacter sakazakii

- Bacillus spp.
- Salmonella enterica
- Shigella spp.
- And more!



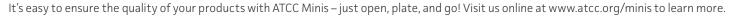
Salmonella is one of the leading causes of foodborne illness in the United States

Don't take chances on the quality of your cultures. Insist on products that meet ATCC's world-renowned standards for high quality and safety. Visit our Food Testing page at www.atcc.org/Food to learn more!

## ATCC° MINIS - MAKING IT EASY FOR YOU TO ENSURE THE ACCURACY OF YOUR ASSAYS

ATCC Minis are the same ATCC Genuine Cultures you've come to trust for your quality control assays, now offered in a convenient, single-use, "mini" format that allows you to get your assays moving faster.

- Put an end to do-it-yourself banking with each six-pack of ready-to-use quality control strains in glycerol stock
- Enjoy using the same ATCC strains you've come to trust with easy-to-open screw-cap tubes
- Make recordkeeping a snap with peel-off labels you can stick directly into your lab notebook
- Conveniently store your strains up to one year at -20°C\*



 $^{\star}$ Some fastidious strains are not stable at -20  $^{\circ}$ C. Please refer to the product sheet for an item's appropriate storage temperature.



## ATCC MICROBIAL PANELS - TAKING THE GUESSWORK OUT OF VALIDATION STUDIES

ATCC Microbial panels enable faster, more intelligent choices when selecting cultures for microbial-based disease research, including the development of novel detection methods for *Salmonella enterica*, Big-six non-O157 Shiga toxin-producing *Escherichia coli* (STEC), and enteric protozoa. Find your ATCC Microbial Panel for food testing online at <a href="https://www.atcc.org/mp">www.atcc.org/mp</a>.

ATCC®	Description	Application
<u>MP-4</u> ™	Clostridioides difficile Panel	Building and testing new methods to detect <i>Clostridioides difficile</i> toxinotypes
<u>MP-9</u> ™	Big-Six Escherichia coli Strains Panel	Quality control assays for non-O157 Shiga toxin-producing Escherichia coli (STEC)
<u>MP-10</u> ™	Big-Six <i>Escherichia coli</i> Genomic DNA Panel	Quality control assays for non-O157 Shiga toxin-producing Escherichia coli (STEC)
<u>MP-14</u> ™	Enteric Protozoa Genomic DNA Panel	Development of molecular-based assays used to diagnose intestinal disease caused by clinically relevant protozoa
<u>MP-15</u> ™	Salmonella enterica Panel	Quality control assays for <i>Salmonella enterica</i> subsp. <i>enterica</i> serovars commonly associated with contaminated food or water
<u>MP-26</u> ™	Non-pathogenic <i>Escherichia coli</i> Surrogates Indicators Panel	Validation applications include beef carcass intervention, beef processing, and selected antimicrobial treatments for <i>E. coli</i> O157:H7 or <i>Salmonella enterica</i>

## **ATCC® GENUINE NUCLEICS**

Throughout the years, the use of rapid microbial methods in food testing has steadily grown to meet increased testing needs. To support this research, ATCC provides an expanding assortment of molecular tools, including:

- Genomic nucleic acids isolated from common foodborne microorganisms
- Synthetic nucleic acid standards representing key target regions from enteric pathogens such as Norovirus, Astrovirus, and Sapovirus
- Microbial panels comprising genomic DNA preparations isolated from enteric protozoa or the Big-Six non-O157 STEC serogroups
- Enterococcus faecalis quantitative DNA standard

Save time and money with ready-to-use nucleic acid preparations from ATCC! Visit us online at www.atcc.org/GenuineNucleics to view our collection.



The ATCC Genuine Nucleics collection encompasses over 1,000 preparations, and is continuing to grow!

### **HOW ARE ATCC GENUINE NUCLEICS AUTHENTICATED?**

Each preparation of high-quality DNA and RNA is isolated or synthetically derived under aseptic conditions to prevent cross-contamination. Further, batches have been fully authenticated and characterized by one or more of the following analyses:

- Agarose gel electrophoresis to ensure integrity
- Spectrophotometry to evaluate purity
- PicoGreen®, RiboGreen®, or Droplet Digital™ PCR (ddPCR™) to calculate concentration
- PCR to confirm functional activity
- Sequencing and short tandem repeat analyses confirm species identity

Don't take chances on the quality of your nucleic acids! Come to the source of ATCC Genuine Nucleics for your laboratory's molecular needs.

## ATCC REPORTER-LABELED STRAINS

ATCC has developed GFP-labeled pathogenic microorganisms to serve as reporter systems that can be used in a variety of applications in both the basic and applied sciences. Each fluorescence-based reporter-labeled strain provides a readily measurable and distinguishable phenotype that can be applied in the analysis of:

- Food testing
- Microbial quantification and detection
- Host-pathogen interactions

- Drug discovery and compound screening
- In vivo imaging
- Quality control

To browse our collection of our reporter-labeled strains, visit us online at www.atcc.org/reporters.

### **BACTERIAL DETECTION AND QUANTIFICATION**

ATCC GFP-labeled microorganisms can be used for a wide range of applications. The expression of a multicopy vector encoding a bright GFP variant (*gfpmut3*) or a synthetic non-*Aequorea* fluorescent protein facilitates visual identification when exposed to UV-light (Figure 1A) or imaged using a detection system such as the IVIS® Spectrum (PerkinElmer) (Figure 1B and 1C). Quick colony differentiation of GFP-labeled microorganisms from unlabeled organisms or contaminants can also be easily performed by using a hand-held UV wand.

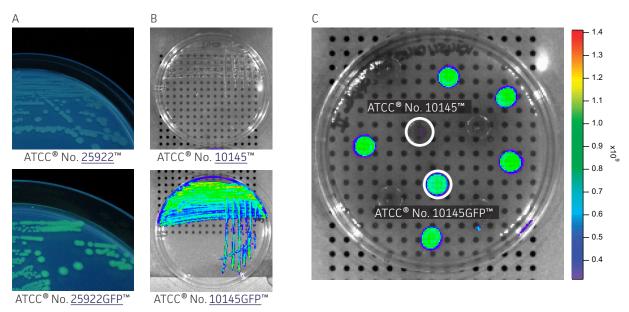


Figure 1: Visual detection of GFP-labeled microorganisms

#### GFP-LABELED STRAINS FOR FOOD TESTING

ATCC has developed GFP-labeled strains representing each of the STEC serotypes required in food testing, including serogroups O26, O45, O103, O111, O121, O145, and O157. These strains offer an efficient and reliable method to distinguish control strain cross-contamination from true contamination, and are appropriate for use as a positive control in quality control assays for *E. coli*.



## ATCC REFERENCE STRAINS USED IN THE QUALITY CONTROL OF MEDIA

ATCC is dedicated to the continual improvement and diversification of our collection of food testing reference materials. To this end, we are constantly improving the technology used to characterize and authenticate the materials in our portfolio.

Only ATCC delivers high quality microorganisms for food testing applications that are authenticated through a polyphasic approach incorporating genotypic, phenotypic, proteotypic, and functional analyses, including:

- Antibiotic susceptibility testing
- Biochemical analyses
- ELISA
- Immunofluorescence
- Morphological analyses
- Sterility testing

- Phenotypic microarray
- Sequencing
- Serotyping
- Toxinotyping
- Viability testing
- VITEK® MS

The high quality nature of our products makes them ideal for use as QC organisms for ensuring the quality and functionality of culture media frequently used in food testing assays, including:

Organism	Selective Media	Quality Control Strains
Bacillus cereus	Mannitol-Egg Yolk-Polymyxin (MYP) Agar	Bacillus cereus (ATCC® <u>11778</u> ™)
		Bacillus cereus (ATCC® <u>14579</u> ™)
		Priestia megaterium (ATCC® <u>14581</u> ™)
		Bacillus circulans (ATCC <sup>®</sup> <u>61</u> ™)
		Bacillus subtilis (ATCC <sup>®</sup> <u>6633</u> ™)
Campylobacter	Campylobacter Blood-free Selective Medium (CCDA)	Campylobacter jejuni (ATCC® <u>33291</u> ™)
		Campylobacter jejuni (ATCC® <u>33292</u> ™)
		Campylobacter coli (ATCC® <u>43478</u> ™)
		Escherichia coli (ATCC® <u>25922</u> ™)
Escherichia coli 0157:H7	CHROMagar™ 0157	Escherichia coli O157:H7 (ATCC® <u>43888</u> ™)
		Escherichia coli (ATCC® <u>25922</u> ™)
		Escherichia coli (ATCC® <u>13047</u> ™)
		Enterococcus faecalis (ATCC® <u>29212</u> ™)
Listeria	PALCAM Agar	Escherichia coli (ATCC® <u>25922</u> ™)
		Enterococcus faecalis (ATCC® <u>29212</u> ™)
		Listeria monocytogenes (ATCC® <u>7644</u> ™)
		Listeria monocytogenes (ATCC <sup>®</sup> <u>19114</u> ™)
		Listeria monocytogenes (ATCC <sup>®</sup> <u>19116</u> ™)
		Staphylococcus aureus subsp. aureus (ATCC® <u>25923</u> ™)
Salmonella	Salmonella-Shigella (SS) Agar	Salmonella enterica (ATCC® <u>14028</u> ™)
	Bismuth Sulfite (BS) Agar	Shigella flexneri (ATCC® <u>12022</u> ™)
		Escherichia coli (ATCC® <u>25922</u> ™)
		Enterococcus faecalis (ATCC® <u>29212</u> ™)
Staphylococcus aureus	Baird Parker Agar	Staphylococcus aureus subsp. aureus (ATCC® <u>25923</u> ™)
		Staphylococcus aureus subsp. aureus (ATCC® 29213™)
		Staphylococcus epidermidis (ATCC® <u>12228</u> ™)
Vibrio	Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar	Vibrio parahaemolyticus (ATCC® <u>17802</u> ™)
		Escherichia coli (ATCC® <u>25922</u> ™)
		Proteus mirabilis (ATCC® <u>12453</u> ™)

# ATCC REFERENCE STRAINS CITED IN PUBLISHED LABORATORY METHODS

Tab	ole	1:	AOAC	Interna	tional

Method	ATCC® No.
AOAC 955.11 - Testing disinfectants against Salmonella typhi, phenol coefficient method.	
Salmonella enterica subsp. enterica AMC	<u>6539</u> ™
AOAC 955.12 - Testing disinfectants against Staphylococcus aureus, phenol coefficient method.	
Staphylococcus aureus subsp. aureus FDA 209	6538™
AOAC 955.13 - Testing disinfectants against Pseudomonas aeruginosa, phenol coefficient method.	
Pseudomonas aeruginosa PRD-10	15442™
AOAC 955.14 - Testing Disinfectants against Salmonella choleraesuis, use-dilution methods	
Salmonella enterica subsp. enterica ETS 34	10708™
AOAC 955.15 - Testing Disinfectants against Staphylococcus aureus, use-dilution methods.	
Staphylococcus aureus subsp. aureus FDA 209	6538™
AOAC 955.17 - Fungicidal activity of disinfectants.	
Trichophyton mentagrophytes 640	9533™
AOAC 957.23 - Antibiotics in feeds, microbiological methods.	
Bacillus cereus FDA strain PCI 213	<u>11778</u> ™
Bacillus spizizenii NRS 231	<u>11778</u> 6633™
Escherichia coli UC 527	<u>2</u> 9998™
Kocuria rhizophila FDA strain PCI 1001	—— 9341™
Micrococcus luteus Mercedita	
Micrococcus luteus 130.21	<u>10240</u> ™
Saccharomyces cerevisiae	9763™
Staphylococcus epidermidis FDA strain PCI 1200	<u>12228</u> ™
AOAC 960.09 - Germicidal and detergent sanitizing action of disinfectants.	
Escherichia coli AMC 198	<u>11229</u> ™
Staphylococcus aureus subsp. aureus FDA 209	<u>6538</u> ™
AOAC 960.46 - Vitamin assays, microbiological method.	
Lactobacillus delbrueckii subsp. lactis 313	<u>7830</u> ™
Lacticaseibacillus rhamnosus	<u>7469</u> ™
AOAC 960.47 - Amino acids in vitamin preparations.	
Enterococcus hirae R	<u>9790</u> ™
Lactiplantibacillus plantarum 17-5	<u>8014</u> ™
Pediococcus acidilactici	8042™
AOAC 960.67 - Hygromycin B in feeds, microbiological method.	
Bacillus spizizenii NRS 231	<u>6633</u> ™
AOAC 961.02 - Germicidal spray products as disinfectants.	
Pseudomonas aeruginosa PRD-10	<u>15442</u> ™
Salmonella enterica subsp. enterica ETS 34	10708™
Staphylococcus aureus subsp. aureus FDA 209	<u>6538</u> ™
Trichophyton mentagrophytes 640	9533™
AOAC 961.15 - Vitamin B6 (pyridoxine, pyridoxal, pyridoxamine) in food extracts, microbiological method.	
Bacillus spizizenii NRS 231	6633™
AOAC 962.14 - Beta-lactam antibiotics in milk, qualitative field disk assay.	
Saccharomyces cerevisiae 4228	9080™

Page 6

Table 1: AOAC International (continued)

Method	ATCC® No.
AOAC 964.02 - Testing Disinfectants against Pseudomonas aeruginosa, use-dilution method.	
Pseudomonas aeruginosa PRD-10	15442™
AOAC 972.56 - Monensin in feeds, microbiological method.	
Bacillus spizizenii NRS 231	<u>6633</u> ™
AOAC 976.37 - Monensin in feeds, turbidimetric method.	
Enterococcus hirae R	8043™
AOAC 977.37 - Chlortetracycline HCl in feeds, turbidimetric method.	
Staphylococcus aureus subsp. aureus 3R7089 strain Oxford	9144™
AOAC 982.16 - Beta-lactam antibiotics in milk, quantitative disc method.	
Geobacillus stearothermophilus NRS T15	10149™
·	101+3
AOAC 982.17 - Beta-lactam antibiotics in milk, qualitative disc method II.  Geobacillus stearothermophilus NRS T15	10149™
·	10149
AOAC 982.43 - Bacitracin in premix feeds.	402/0™
Micrococcus luteus 130.21	10240™
AOAC 984.34 - Detection of Escherichia coli producing heat-labile enterotoxin, DNA colony hybridization method.	
Escherichia coli H10407	35401™
Escherichia coli pBR313	37018™
AOAC 985.32 - Vitamin B6 in ready-to-feed milk-based infant formula, microbiological method.	
Saccharomyces cerevisiae 4228	9080™
AOAC 986.23 - Vitamin B12 activity in milk-based infant formula, turbidimetric method.	
Lactobacillus delbrueckii subsp. lactis 313	<u>7830</u> ™
Weissella confusa 548-D	10881™
AOAC 991.38 - Salmonella in Foods.	
Escherichia coli FDA strain Seattle 1946	25922™
AOAC 991.47 - Testing disinfectants against Salmonella choleraesuis, hard surface carrier test method.	
Salmonella enterica subsp. enterica ETS 34	10708™
AOAC 992.05 - Folic acid (pteroylglutamic acid) in infant formula, microbiological methods.	
Lacticaseibacillus rhamnosus	7469™
AOAC 992.18 - Listeria species - Biochemical identification method (MICRO-ID) Listeria.	
Lactococcus lactis subsp. cremoris NCDO 607	<u>19257</u> ™
Listeria grayi V-1	25400™
Listeria monocytogenes Li 20	 19111™
Listeria seeligeri CIP 100100	35967™
Streptococcus mitis	<u>6249</u> ™
AOAC 992.19 - Listeria species - Biochemical identification method (Vitek® GPI and GNI+).	
Acinetobacter baumannii 2208	<u>19606</u> ™
Bordetella bronchiseptica 03127	<u>10580</u> ™
Enterococcus durans 23C2	<u>6056</u> ™
Enterococcus faecalis Portland	29212™
Klebsiella pneumoniae subsp. pneumoniae	<u>13883</u> ™
Proteus mirabilis	7002™
Pseudomonas aeruginosa Boston 41501	27853™
Serratia odorifera 1073	33077™
Shigella sonnei	25931™
Staphylococcus xylosus KL 162	29971™

Table 1.	ΔΩΔΓ	International	(continued	h
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Method	ATCC® No.
Streptococcus equi subsp. equi 2-1-23	9528™
Streptococcus gallolyticus 38	<u>9809</u> ™
Streptococcus pneumoniae R36a rough phase	<u>27336</u> ™
Streptococcus pyogenes Bruno	<u>19615</u> ™
AOAC 993.29 - Bacitracin-MD (BMD) in complete feed, microbiological plate assay method.	
Micrococcus luteus 130.21	<u>10240</u> ™
AOAC 997.17 - Microbial ranking of porous packaging materials (Exposure Chamber Method).	
Bacillus atrophaeus NRS 1221A	<u>9372</u> ™
AOAC 998.02 - Neomycin in feeds - stahl microbiological agar diffusion assay.	
Staphylococcus epidermidis FDA strain PCI 1200	<u>12228</u> ™
AOAC 2004.05 - Total folates in cereals and cereal foods.	
Lacticaseibacillus rhamnosus	<u>7469</u> ™
able 2: U.S. Food and Drug Administration (BAM)	
Method	ATCC® No.
BAM 10.F - Detection and enumeration of Listeria monocytogenes in foods, the CAMP Test.	
Rhodococcus equi	<u>6939</u> ™
Staphylococcus aureus subsp. aureus Seattle 1945	<u>25923</u> ™
Staphylococcus pseudintermedius	49444 <sup>™</sup>
BAM 13b - Electrophoretic and immunoblot analysis of Staphylococcal Enterotoxins in food.	
Staphylococcus aureus subsp. aureus FDA 196E	<u>13565</u> ™
BAM 20A - Inhibitory substances in milk.	
Geobacillus stearothermophilus NRS T15	<u>10149</u> ™
Kocuria rhizophila FDA strain PCI 1001	<u>9341</u> ™
BAM 24 - Identification of foodborne bacterial pathogens by Gene Probes: Enterotoxigenic Escherichia c Heat-Stable Enterotoxin (Porcine), and Heat-Labile Enterotoxin.	coli: Heat-Stable Enterotoxin (Huma
Escherichia coli FDA strain Seattle 1946	<u>25922</u> ™
BAM 24 - Identification of Foodborne Bacterial Pathogens by Gene Probes, Listeria monocytogenes: Com Protein (iap) and Hemolysin (hly) Gene Probes - AD713.	nbination of Invasion-Associated
Listeria innocua SLCC 3379	<u>33090</u> ™
BAM 24 - Identification of Foodborne Bacterial Pathogens by Gene Probes, Vibrio cholerae ctxA11.	
Vibrio cholerae	<u>14033</u> ™
BAM 24 - Identification of Foodborne Bacterial Pathogens by Gene Probes, Vibrio vulnificus VV6.	
Vibrio cholerae	14033™
Vibrio vulnificus 324	
BAM 24 - Identification of Foodborne Bacterial Pathogens by Gene Probes, Vibrio parahaemolyticus tdh	
BAM 24 - Identification of Foodborne Bacterial Pathogens by Gene Probes, Vibrio parahaemolyticus tdh Vibrio parahaemolyticus EB 101	<u>17802</u> ™
Vibrio parahaemolyticus EB 101  BAM 4.II.3 - Enumeration of Escherichia coli and the Coliform bacteria: LST-MUG method for detecting Es	
Vibrio parahaemolyticus EB 101 BAM 4.II.3 - Enumeration of Escherichia coli and the Coliform bacteria: LST-MUG method for detecting Es Exclusive of Bivalve Mollucan Shellfish.	scherichia coli in chilled or Frozen Fo
Vibrio parahaemolyticus EB 101  BAM 4.II.3 - Enumeration of Escherichia coli and the Coliform bacteria: LST-MUG method for detecting Es Exclusive of Bivalve Mollucan Shellfish.  Enterobacter aerogenes NCDC 819-56	scherichia coli in chilled or Frozen Fo

	ATCC® No.
BS EN 1104:2005 - Paper and board intended to come into contact with foodstuffs - Determin	nation of the transfer of antimicrobial constituent
Aspergillus niger 4247	<u>6275</u> ™
BS EN 13697:2001 - Chemical disinfectants and antiseptics - Quantitative non-porous surface fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutio mechanical action (phase 2/step 2).	
Aspergillus brasiliensis WLRI 034(120)	16404™
Candida albicans 3147	
Enterococcus hirae FDA M19	
scherichia coli MacLeod	
Pseudomonas aeruginosa PRD-10	15442™
iaccharomyces cerevisiae	9763™
Salmonella enterica subsp. Enterica	<u>13311</u> ™
Staphylococcus aureus subsp. aureus FDA 209	<u>6538</u> ™
BS EN 13704:2002 - Chemical disinfectants - Quantitative suspension test for the evaluation used in food, industrial, domestic and institutional areas - Test method and requirements (ph	nase 2, step 1).
Bacillus cereus type strain A, variant IV	<u>12826</u> ™
Bacillus subtilis subsp. spizizenii NRS 231	<u>6633</u> ™
3S EN 14131:2003 - Foodstuffs - Determination of folate by microbiological assay.	
acticaseibacillus rhamnosus	<u>7469</u> ™
BS EN 1650:1998 - Chemical disinfectants and antiseptics - Quantitative suspension test for t disinfectants and antiseptics used in food, industrial, domestic and institutional areas - Test	
Aspergillus brasiliensis WLRI 034(120)	<u>16404</u> ™
Candida albicans 3147	<u>10231</u> ™
Saccharomyces cerevisiae	<u>9763</u> ™
BS EN ISO 11290-1:1997 - Microbiology of food and animal feeding stuffs - Horizontal method monocytogenes - Part 1: Detection method, Annex B.	d for the detection and enumeration of Listeria
Interococcus faecalis Portland	<u>29212</u> ™
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Escherichia coli FDA strain Seattle 1946	
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isteria monocytogenes 1071/53	
isteria monocytogenes Li20	25922 <sup>™</sup> 33090 <sup>™</sup> 13932 <sup>™</sup>
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Escherichia coli FDA strain Seattle 1946 Listeria innocua SLCC 3379 Listeria monocytogenes 1071/53 Listeria monocytogenes Li20 Rhodococcus equi Staphylococcus aureus subsp. aureus Seattle 1945 BS EN ISO 11290-2:1998 - Microbiology of food and animal feeding stuffs - Horizontal method monocytogenes - Part 2: Enumeration method, Annex B. Rhodococcus equi Staphylococcus aureus subsp. aureus Seattle 1945 BS EN ISO 21871:2006 - Microbiology of food and animal feeding stuffs. Bacillus cereus FDA strain PCI 213 Escherichia coli FDA strain Seattle 1946 Escherichia coli Crooks BS EN ISO 6888-3:2003 - Microbiology of food and animal feeding stuffs - Horizontal method is	25922 <sup>™</sup> 33090 <sup>™</sup> 13932 <sup>™</sup> 19111 <sup>™</sup> 6939 <sup>™</sup> 25923 <sup>™</sup> d for the detection and enumeration of Listeria  6939 <sup>™</sup> 25923 <sup>™</sup> 11778 <sup>™</sup> 25922 <sup>™</sup> 8739 <sup>™</sup> 8739 <sup>™</sup>
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Enterococcus faecalis Portland Escherichia coli FDA strain Seattle 1946 Listeria innocua SLCC 3379 Listeria monocytogenes 1071/53 Listeria monocytogenes Li20 Rhodococcus equi Staphylococcus aureus subsp. aureus Seattle 1945 BS EN ISO 11290-2:1998 - Microbiology of food and animal feeding stuffs - Horizontal method monocytogenes - Part 2: Enumeration method, Annex B. Rhodococcus equi Staphylococcus aureus subsp. aureus Seattle 1945 BS EN ISO 21871:2006 - Microbiology of food and animal feeding stuffs. Bacillus cereus FDA strain PCI 213 Escherichia coli FDA strain Seattle 1946 Escherichia coli Crooks BS EN ISO 6888-3:2003 - Microbiology of food and animal feeding stuffs - Horizontal method is staphylococci (Staphylococcus aureus and other species) - Part3: Detection and MPN techniq Penicillium aurantiogriseum Staphylococcus aureus subsp. aureus FDA 209	25922 <sup>™</sup> 33090 <sup>™</sup> 13932 <sup>™</sup> 19111 <sup>™</sup> 6939 <sup>™</sup> 25923 <sup>™</sup> d for the detection and enumeration of Listeria  6939 <sup>™</sup> 25923 <sup>™</sup> 11778 <sup>™</sup> 25922 <sup>™</sup> 8739 <sup>™</sup> for the enumeration of coagulase-positive use for low numbers.
Escherichia coli FDA strain Seattle 1946 Listeria innocua SLCC 3379 Listeria monocytogenes 1071/53 Listeria monocytogenes Li20 Rhodococcus equi Staphylococcus aureus subsp. aureus Seattle 1945 BS EN ISO 11290-2:1998 - Microbiology of food and animal feeding stuffs - Horizontal method monocytogenes - Part 2: Enumeration method, Annex B. Rhodococcus equi Staphylococcus aureus subsp. aureus Seattle 1945 BS EN ISO 21871:2006 - Microbiology of food and animal feeding stuffs. Bacillus cereus FDA strain PCI 213 Escherichia coli FDA strain Seattle 1946 Escherichia coli Crooks BS EN ISO 6888-3:2003 - Microbiology of food and animal feeding stuffs - Horizontal method for the policy of the policy of the policy of the part 3: Detection and MPN techniques the policy of the part 3: Detection and MPN techniques the policy of the part 3: Detection and MPN techniques the policy of the part 3: Detection and MPN techniques the policy of the part 3: Detection and MPN techniques the part 3: Detection and 3: Detection and 3: Detection and 3: Detection and 3: Detection	25922 <sup>™</sup> 33090 <sup>™</sup> 13932 <sup>™</sup> 19111 <sup>™</sup> 6939 <sup>™</sup> 25923 <sup>™</sup> d for the detection and enumeration of Listeria  6939 <sup>™</sup> 25923 <sup>™</sup> 11778 <sup>™</sup> 25922 <sup>™</sup> 8739 <sup>™</sup> for the enumeration of coagulase-positive use for low numbers.

Table 4.	International Organization for Standardization (IS	รดา
Iabic T.	ilitei ilativilai vi vallizativii ivi Stalivai vizativii II.	JU 1

Method	ATCC® No.
ISO 6888-3:2003 - Microbiology of food and animal feeding stuffs - Horizontal method for t (Staphylococcus aureus and other species) - Part3: Detection and MPN technique for low n	
Escherichia coli FDA strain Seattle 1946	<u>25922</u> ™
Escherichia coli Crooks	<u>8739</u> ™
Penicillium aurantiogriseum H45	8732 <sup>™</sup>
Staphylococcus aureus subsp. aureus FDA 209	<u>6538</u> ™
Staphylococcus aureus subsp. aureus Seattle 1945	<u>25923</u> ™
ISO 11290-2:1998 - Microbiology of food and animal feeding stuffs - Horizontal method for monocytogenes - Part 2: Enumeration method.	the detection and enumeration of Listeria
Rhodococcus equi	6939™
Staphylococcus aureus subsp. aureus Seattle 1945	<u>25923</u> ™
ISO 11133-2:2003 - Microbiology of food and animal feeding stuffs - Guidelines on preparat guidelines on performance testing of culture media.	tion and production of culture media - Part 2: Practic
Aspergillus brasiliensis WLRI 034(120)	<u>16404</u> ™
Bacillus cereus FDA strain PCI 213	<u>11778</u> ™
Bacillus spizizenii NRS 231	<u>6633</u> ™
Candida albicans 3147	<u>10231</u> ™
Citrobacter freundii LRA 117.03.76	<u>43864</u> ™
Clostridium perfringens 281/50	<u>12916</u> ™
Clostridium perfringens CN 1491	<u>13124</u> ™
Enterococcus faecalis	<u>19433</u> ™
Enterococcus faecalis Portland	<u>29212</u> ™
Escherichia coli FDA strain Seattle 1946	<u>25922</u> ™
Escherichia coli Crooks	<u>8739</u> ™
Escherichia coli	<u>11775</u> ™
Escherichia coli CDC EDL 932	<u>43894</u> ™
Escherichia coli CDC EDL 933	<u>43895</u> ™
Latilactobacillus sakei subsp. sakei T.S.	<u>15521</u> ™
Lactococcus lactis subsp. lactis OJ	<u>19435</u> ™
Listeria monocytogenes Li 20	<u>19111</u> <sup>™</sup>
Listeria monocytogenes 1071/53	<u>13932</u> ™
Pediococcus damnosus Be.1	<u>29358</u> ™
Penicillium aurantiogriseum IMI 19759	<u>16025</u> ™
Proteus mirabilis CDC PR 14	<u>29906</u> ™
Pseudomonas aeruginosa Boston 41501	<u>27853</u> ™
Saccharomyces cerevisiae	<u>9763</u> ™
Salmonella enterica subsp. enterica CDC K-1891	<u>13076</u> ™
Salmonella enterica subsp. enterica CDC 6516-60	<u>14028</u> ™
Staphylococcus aureus subsp. aureus FDA 209	<u>6538</u> ™
Staphylococcus aureus subsp. aureus Seattle 1945	<u>25923</u> ™
Staphylococcus epidermidis FDA strain PCI 1200	<u>12228</u> ™
Yersinia enterocolitica 33114	<u>9610</u> ™
Yersinia enterocolitica subsp. enterocolitica Billups-1803-68	23715™

### Table 5: Japanese Industrial Standards (JIS)

Method	ATCC® No.	
Jis K 3705:2008 Test Methods For Culture Media-Culture Medium For Salm	onella SppDetection Of Salmonella Spp.	
Escherichia coli	<u>25922</u> ™	
Enterococcus faecalis	<u>29212</u> ™	
Jis K 3706-1:2008 Test Methods For Culture Media-Culture Medium For Listeria Monocytogenes-Part 1: Detection Of Listeria Monocytogenes		
Staphylococcus aureus	<u>25923</u> ™	
Escherichia coli	<u>25922</u> ™	
Enterococcus faecalis	<u>29212</u> ™	
Jis K 3706-2:2008 Test Methods For Culture Media-Culture Medium For Listeria Monocytogenes-Part 1: Enumeration Of Listeria Monocytogene		
Staphylococcus aureus	<u>25923</u> ™	
Rhodococcus equi	6939™	



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