

Vitroids™ and LENTICULE® discs

Strain equivalency to ATCC and CMCC

All our strains for the Vitroids™ and LENTICULE® discs are derived from the cell culture collections CECT, NCTC and NCPF. Below you can find the history of each strain which was used, additionally to gene sequences, for building cross references to ATCC, CMCC and also other cell culture collection.

Product Number	Material Number	Organism	WDCM Number	Brand	CFU Range	Culture Collection	Strain Number	ATCC	CMCC	History
RMF02275L	RMF02275L-10EA	<i>Aspergillus brasiliensis</i> (formerly <i>Aspergillus niger</i>)	00053	LENTICULE	30-120	NCPF®	2275	16404	-	NCTC in 1980 < IMI, IMI 149007 < ATCC, ATCC 16404
CRM07464L	CRM07464L-10EA	<i>Bacillus cereus</i>	-	LENTICULE	30-120	NCTC®	7464	10876	-	NCTC in 1948 < American Type Culture Collection (as ATCC 10876) < Northern Regional Research Laboratory (US Department of Agriculture, Peoria, Illinois, USA). Isolated from contaminated flask, geographic origin unknown, before 1949.
CRM07464M	CRM07464M-10EA	<i>Bacillus cereus</i>	-	LENTICULE	500-50,000	NCTC®	7464	10876	-	NCTC in 1948 < American Type Culture Collection (as ATCC 10876) < Northern Regional Research Laboratory (US Department of Agriculture, Peoria, Illinois, USA). Isolated from contaminated flask, geographic origin unknown, before 1949.
RMF03255H	RMF03255H-10EA	<i>Candida albicans</i>	00055	LENTICULE	>100,000	NCPF®	3255	2091	-	NCTC < Dr B Kirsop, NCYC Redhill, as NCYC 854. (1979) < ATCC, ATCC 2091. (1976) < R C Chodat, 132
RMF03255L	RMF03255L-10EA	<i>Candida albicans</i>	00055	LENTICULE	30-120	NCPF®	3255	2091	-	NCTC < Dr B Kirsop, NCYC Redhill, as NCYC 854. (1979) < ATCC, ATCC 2091. (1976) < R C Chodat, 133
RM09750L	RM09750L-10EA	<i>Citrobacter freundii</i>	-	LENTICULE	30-120	NCTC®	9750	8090	-	NCTC in 1953 < American Type Culture Collection (as ATCC 8090) < CH Werkman. Isolation substrate unknown, geographic origin unknown, before 1954.
CRM00506L	CRM00506L-10EA	<i>Clostridium bifermentans</i>	00079	LENTICULE	30-120	NCTC®	506	-	-	NCTC in 1920 < M. Robertson (Lister Institute of Preventative Medicine, London, UK). Isolation substrate unknown, geographic origin unknown, before 1920.
CRM13170L	CRM13170L-10EA	<i>Clostridium perfringens</i>	00201	LENTICULE	30-120	NCTC®	13170	-	-	NCTC in 2000 < K. A. Moojman (RIVM, the Netherlands) < Isolated by RIVM, from patient / food, The Netherlands, in 1988.

Product Number	Material Number	Organism	WDCM Number	Brand	CFU Range	Culture Collection	Strain Number	ATCC	CMCC	History
CRM13170M	CRM13170M-10EA	Clostridium perfringens	00201	LENTICULE	500-50,000	NCTC®	13170	-	-	NCTC in 2000 < K. A. Moojman (RIVM, the Netherlands) < Isolated by RIVM, from patient / food, The Netherlands, in 1988.
CRM11467L	CRM11467L-10EA	Cronobacter sakazakii	00214	LENTICULE	30-120	NCTC®	11467	29544	-	NCTC in 1982 < B. Holmes (The National Collection of Type Cultures, London, UK). Isolated from throat, geographic origin unknown, before 1983.
CRM00775H	CRM00775H-10EA	Enterococcus faecalis	00009	LENTICULE	>100,000	NCTC®	775	19433	-	NCTC in 1920 < Dr C. L. Hannay (National Institute for Research in Dairying, Shinfield, UK). Isolation substrate unknown, geographic origin unknown, before 1921.
CRM00775L	CRM00775L-10EA	Enterococcus faecalis	00009	LENTICULE	30-120	NCTC®	775	19433	-	NCTC in 1920 < Dr C. L. Hannay (National Institute for Research in Dairying, Shinfield, UK). Isolation substrate unknown, geographic origin unknown, before 1921.
CRM00775M	CRM00775M-10EA	Enterococcus faecalis	00009	LENTICULE	500-50,000	NCTC®	775	19433	-	NCTC in 1920 < Dr C. L. Hannay (National Institute for Research in Dairying, Shinfield, UK). Isolation substrate unknown, geographic origin unknown, before 1921.
CRM09001H	CRM09001H-10EA	Escherichia coli	00090	LENTICULE	>100,000	NCTC®	9001	11775	-	NCTC in 1952 < Dr F. Kauffmann (Statens Serum Institut, Copenhagen, Denmark). Isolated from human urine (case of cystitis), geographic origin unknown, before 1953.
CRM09001L	CRM09001L-10EA	Escherichia coli	00090	LENTICULE	30-120	NCTC®	9001	11775	-	NCTC in 1952 < Dr F. Kauffmann (Statens Serum Institut, Copenhagen, Denmark). Isolated from human urine (case of cystitis), geographic origin unknown, before 1953.
CRM09001M	CRM09001M-10EA	Escherichia coli	00090	LENTICULE	500-50,000	NCTC®	9001	11775	-	NCTC in 1952 < Dr F. Kauffmann (Statens Serum Institut, Copenhagen, Denmark). Isolated from human urine (case of cystitis), geographic origin unknown, before 1953.
CRM13216L	CRM13216L-10EA	Escherichia coli	00202	LENTICULE	30-120	NCTC®	13216	-	-	NCTC in 2001 < S. Brimble (CPHL EQA, Colindale, London, UK) < Isolated by Nicola Gough from unpasteurised brie in UK, 1996.
CRM12900L	CRM12900L-10EA	Escherichia coli O157 (NT)	00014	LENTICULE	30-120	NCTC®	12900	700728	-	NCTC in 1996 < Dr Henry R. Smith (CPHL, Public Health Laboratory Service, Colindale, London, UK) < Isolated by Federal Public Health Lab (Innsbruck, Austria), from unknown substrate, Innsbruck Austria, in 1992
CRM11368M	CRM11368M-10EA	Fluoribacter bozemanii (formerly Legionella bozemanii)	-	LENTICULE	500-50,000	NCTC®	11368	33217	-	NCTC in 1980 < G. K. Morris (CDC, Atlanta, GA, USA). Isolation substrate unknown, geographic origin unknown, before 1981.
CRM10006L	CRM10006L-10EA	Klebsiella aerogenes (former Enterobacter aerogenes)	00175	LENTICULE	30-120	NCTC®	10006	13048	-	NCTC in 1958 < Dr P. R. Edwards (CDC, Atlanta, GA, USA). Isolation substrate unknown, geographic origin unknown, before 1959.
CRM10006M	CRM10006M-10EA	Klebsiella aerogenes (former Enterobacter aerogenes)	00175	LENTICULE	500-50,000	NCTC®	10006	13048	-	NCTC in 1958 < Dr P. R. Edwards (CDC, Atlanta, GA, USA). Isolation substrate unknown, geographic origin unknown, before 1959.
CRM08167L	CRM08167L-10EA	Klebsiella oxytoca	-	LENTICULE	30-120	NCTC®	8167	-	-	NCTC in 1950 < E. Windle Taylor (Metropolitan Water Board, New River Head, London, UK). Isolation substrate unknown, geographic origin unknown, before 1951.
CRM12821L	CRM12821L-10EA	Legionella pneumophila	00205	LENTICULE	30-120	NCTC®	12821	-	-	NCTC in 1993 < Isolated by Dr J. Lee, from Water, Queens Medical Centre Nottingham UK, in 1993.
CRM12821M	CRM12821M-10EA	Legionella pneumophila	00205	LENTICULE	500-50,000	NCTC®	12821	-	-	NCTC in 1993 < Isolated by Dr J. Lee, from Water, Queens Medical Centre Nottingham UK, in 1993.
CRM11994L	CRM11994L-10EA	Listeria monocytogenes	00019	LENTICULE	30-120	NCTC®	11994	-	-	NCTC in 1986 < P. N. Pini (Food Hygiene Laboratory, Central Public Health Laboratory, Colindale, London, UK). Isolated from soft cheese, UK, in 1986-85.

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CRM11994M	CRM11994M-10EA	Listeria monocytogenes	00019	LENTICULE	500-50,000	NCTC®	11994	-	-	NCTC in 1986 < P. N. Pini (Food Hygiene Laboratory, Central Public Health Laboratory, Colindale, London, UK). Isolated from soft cheese, UK, in 1986-85.
CRM10662L	CRM10662L-10EA	Pseudomonas aeruginosa	00114	LENTICULE	30-120	NCTC®	10662	25668	-	NCTC in 1969 < Isolated by P. M. Waterworth, from a clinical specimen, geographic origin unknown, in 1968.
CRM10662M	CRM10662M-10EA	Pseudomonas aeruginosa	00114	LENTICULE	500-50,000	NCTC®	10662	25668	-	NCTC in 1969 < Isolated by P. M. Waterworth, from a clinical specimen, geographic origin unknown, in 1968.
CRM09528L	CRM09528L-10EA	Raoultella planticola (formerly Klebsiella aerogenes)	-	LENTICULE	30-120	NCTC®	9528	-	-	NCTC in 1954 < Dr N. P. Burman (Metropolitan Water Board, New River Head, London, UK). Isolated from water, geographic origin unknown, in 1954.
CRM09528M	CRM09528M-10EA	Raoultella planticola (formerly Klebsiella aerogenes)	-	LENTICULE	500-50,000	NCTC®	9528	-	-	NCTC in 1954 < Dr N. P. Burman (Metropolitan Water Board, New River Head, London, UK). Isolated from water, geographic origin unknown, in 1954.
RMF03191L	RMF03191L-10EA	Saccharomyces cerevisiae	-	LENTICULE	30-120	NCPF®	3191	9763	-	NCTC < Dr S Shadomy, Richmond Va. USA, ATCC 9763
RMF03191M	RMF03191M-10EA	Saccharomyces cerevisiae	-	LENTICULE	500-50,000	NCPF®	3191	9763	-	NCTC < Dr S Shadomy, Richmond Va. USA, ATCC 9763
CRM12023L	CRM12023L-10EA	Salmonella enterica subsp. enterica serovar Typhimurium	00031	LENTICULE	30-120	NCTC®	12023	14028	-	NCTC in 1988 < ATCC < CDC (Atlanta GA, USA) < University of Missouri. Isolated from an Animal, Geographic Origin Unknown, before 1989.
CRM06676L	CRM06676L-10EA	Salmonella enteritidis	-	LENTICULE	30-120	NCTC®	6676	-	-	NCTC in 1944 < Dr J. Taylor (Salmonella Reference Laboratory, Colindale, London) < The Enteric Laboratory (Kasauli, India). Isolation substrate unknown, geographic origin unknown, before 1945.
CRM07832L	CRM07832L-10EA	Salmonella nottingham	-	LENTICULE	30-120	NCTC®	7832	-	-	NCTC in 1949 < Dr J. Taylor (Salmonella Reference Laboratory, Colindale, London). Isolated substrate unknown, geographic origin unknown, before 1950.
CRM06571L	CRM06571L-10EA	Staphylococcus aureus	00035	LENTICULE	30-120	NCTC®	6571	9144	-	NCTC in 1944 < Dr N. G. Heatly. Isolated from "third subculture from a tube set", Oxford UK, in 1940.
CRM06571M	CRM06571M-10EA	Staphylococcus aureus	00035	LENTICULE	500-50,000	NCTC®	6571	9144	-	NCTC in 1944 < Dr N. G. Heatly. Isolated from "third subculture from a tube set", Oxford UK, in 1940.
CRM11047L	CRM11047L-10EA	Staphylococcus epidermidis	00132	LENTICULE	30-120	NCTC®	11047	14990	-	NCTC in 1976 < Czech Collection of Microorganisms < ATCC < American Meat Institute Foundation (AMIF, Chicago, USA) < R. H. Deibel. Isolated from a nose, geographic origin unknown, before 1968.
CRM11371M	CRM11371M-10EA	Tatlockia micdadei (formerly Legionella micdadei)	-	LENTICULE	500-50,000	NCTC®	11371	33218	-	NCTC in 1980 < G. K. Morris (CDC, Atlanta, GA, USA). Isolation substrate unknown, geographic origin unknown, before 1981.
RM11218Q	RM11218Q-10EA	Vibrio furnissii	00186	LENTICULE	>100	NCTC®	11218	-	-	NCTC in 1978 < J. Taylor (Truro Public Health Laboratories, Truro, Cornwall, UK) < Isolated by Public Health Laboratory, Hull (Hull, UK). Isolated from estuarine water, Hull UK, in 1974.
RM10903Q	RM10903Q-10EA	Vibrio parahaemolyticus	-	LENTICULE	>100	NCTC®	10703	-	-	NCTC in 1970 < D. A. Mitchison (Royal Postgraduate Medical School, Hammersmith, London, UK) < Isolated by the Bacteriology Department (Royal Postgraduate Medical School, Hammersmith, London, UK). Isolated from a heel swab, London UK, in 1968.
RM11176L	RM11176L-10EA	Yersinia enterocolitica	-	LENTICULE	30-120	NCTC®	11176	-	-	NCTC in 1977 < N. S. Mair (Public Health Laboratory Service, Leicester, UK). Isolated from case of mesenteric adenitis ileitis, Birmingham UK, before 1977.

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VT000617	VT000617-10EA	<i>Aerococcus viridans</i>	00061	Vitroids	50,000-150,000	CECT®	978	11563	-	< NCIB, 1982 < Institute for Fermentation, Osaka (IFO), 1965 < NISL < C.F. Niven Jr. < NCTC < R.E.O. Williams, PHLS Colindale, UK
VT070943	VT070943-10EA	<i>Alicyclobacillus acidoterrestris</i>	-	Vitroids	80-130	CECT®	7094	49025	-	CECT, 2005 < CIP, 1999 < ATCC < K. Poralla (<i>Bacillus acidoterrestris</i>) < B. Hippchen < G. Deinhard
VT070946	VT070946-10EA	<i>Alicyclobacillus acidoterrestris</i>	-	Vitroids	1,000-10,000	CECT®	7094	49025	-	CECT, 2005 < CIP, 1999 < ATCC < K. Poralla (<i>Bacillus acidoterrestris</i>) < B. Hippchen < G. Deinhard
VT000532	VT000532-10EA	<i>Aspergillus brasiliensis</i> (formerly <i>Aspergillus niger</i>)	00053	Vitroids	15-80	CECT®	2574	16404	-	(<i>A. niger</i>) < IMI, 1970 < ATCC < Ringel, S.M.
VT000533	VT000533-10EA	<i>Aspergillus brasiliensis</i> (formerly <i>Aspergillus niger</i>)	00053	Vitroids	80-130	CECT®	2574	16404	-	(<i>A. niger</i>) < IMI, 1970 < ATCC < Ringel, S.M.
VT001833	VT001833-10EA	<i>Aspergillus caesiellus</i> (<i>restrictus</i>)	00183	Vitroids	80-130	CECT®	20807	42693	-	(<i>Aspergillus restrictus</i>) < JCM, 2004 < IAM < Klich, M.A., SRRC < FRR < A. D. Hocking
VT000012	VT000012-10EA	<i>Bacillus cereus</i>	00001	Vitroids	15-80	CECT®	193	11778	-	< NCIMB, 1957 < ATCC < FDA (<i>Bacillus mycoides</i>)
VT000013	VT000013-10EA	<i>Bacillus cereus</i>	00001	Vitroids	80-130	CECT®	193	11778	-	< NCIMB, 1957 < ATCC < FDA (<i>Bacillus mycoides</i>)
VT000016	VT000016-10EA	<i>Bacillus cereus</i>	00001	Vitroids	1,000-10,000	CECT®	193	11778	-	< NCIMB, 1957 < ATCC < FDA (<i>Bacillus mycoides</i>)
VT000017	VT000017-10EA	<i>Bacillus cereus</i>	00001	Vitroids	50,000-150,000	CECT®	193	11778	-	< NCIMB, 1957 < ATCC < FDA (<i>Bacillus mycoides</i>)
VT000032	VT000032-10EA	<i>Bacillus spizizenii</i> (formerly <i>Bacillus subtilis</i> subsp. <i>Spizizenii</i>)	00003	Vitroids	15-80	CECT®	356	6633	63501	< NCIB < ATCC < N.R. Smith, NRS 231 < K.F. Kellerman
VT000033	VT000033-10EA	<i>Bacillus spizizenii</i> (formerly <i>Bacillus subtilis</i> subsp. <i>Spizizenii</i>)	00003	Vitroids	80-130	CECT®	356	6633	63501	< NCIB < ATCC < N.R. Smith, NRS 231 < K.F. Kellerman
VT000036	VT000036-10EA	<i>Bacillus spizizenii</i> (formerly <i>Bacillus subtilis</i> subsp. <i>Spizizenii</i>)	00003	Vitroids	1,000-10,000	CECT®	356	6633	63501	< NCIB < ATCC < N.R. Smith, NRS 231 < K.F. Kellerman
VT000037	VT000037-10EA	<i>Bacillus spizizenii</i> (formerly <i>Bacillus subtilis</i> subsp. <i>Spizizenii</i>)	00003	Vitroids	50,000-150,000	CECT®	356	6633	63501	< NCIB < ATCC < N.R. Smith, NRS 231 < K.F. Kellerman
VT041372	VT041372-10EA	<i>Burkholderia cepacia</i>	-	Vitroids	15-80	CECT®	4137	25416	-	< NCTC < ATCC, 1970 < R.W. Ballard < M.P. Starr < W.H. Burkholder
VT041376	VT041376-10EA	<i>Burkholderia cepacia</i>	-	Vitroids	1,000-10,000	CECT®	4137	25416	-	< NCTC < ATCC, 1970 < R.W. Ballard < M.P. Starr < W.H. Burkholder
VT000542	VT000542-10EA	<i>Candida albicans</i>	00054	Vitroids	15-80	CECT®	1394	10231	-	< CBS, 1972 < ATCC < Emmons, C.W. < Wright, J.E.
VT000543	VT000543-10EA	<i>Candida albicans</i>	00054	Vitroids	80-130	CECT®	1394	10231	-	< CBS, 1972 < ATCC < Emmons, C.W. < Wright, J.E.
VT000546	VT000546-10EA	<i>Candida albicans</i>	00054	Vitroids	1,000-10,000	CECT®	1394	10231	-	< CBS, 1972 < ATCC < Emmons, C.W. < Wright, J.E.
VT000062	VT000062-10EA	<i>Citrobacter freundii</i>	00006	Vitroids	15-80	CECT®	7464	43864	-	< CCM, 2006 < CIP, 1992 < Biomerieux, France < Mandrin, St. Eloi Hosp., Montpellier, France
VT000063	VT000063-10EA	<i>Citrobacter freundii</i>	00006	Vitroids	80-130	CECT®	7464	43864	-	< CCM, 2006 < CIP, 1992 < Biomerieux, France < Mandrin, St. Eloi Hosp., Montpellier, France

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VT000066	VT000066-10EA	<i>Citrobacter freundii</i>	00006	Vitroids	1,000-10,000	CECT®	7464	43864	-	< CCM, 2006 < CIP, 1992 < Biomerieux, France < Mandrin, St. Eloi Hosp., Montpellier, France
VT000067	VT000067-10EA	<i>Citrobacter freundii</i>	00006	Vitroids	50,000-150,000	CECT®	7464	43864	-	< CCM, 2006 < CIP, 1992 < Biomerieux, France < Mandrin, St. Eloi Hosp., Montpellier, France
VT004014	VT004014-10EA	<i>Citrobacter freundii</i>	-	Vitroids	130-300	CECT®	401	8090	-	< NCTC, 1953 < ATCC < C.H. Werkman
VT004016	VT004016-10EA	<i>Citrobacter freundii</i>	-	Vitroids	1,000-10,000	CECT®	401	8090	-	< NCTC, 1953 < ATCC < C.H. Werkman
VT000582	VT000802-10EA	<i>Clostridium perfringens</i>	00080	Vitroids	15-80	CECT	7468	12916	-	< KCTC < Y. H. Chang < NCTC, 1952 < B. Hobbs, PHLS Colindale, UK
VT000803	VT000803-10EA	<i>Clostridium perfringens</i>	00080	Vitroids	80-130	CECT®	7468	12916	-	< KCTC < Y. H. Chang < NCTC, 1952 < B. Hobbs, PHLS Colindale, UK
VT000082	VT000082-10EA	<i>Clostridium sporogenes</i>	00008	Vitroids	15-80	CECT®	485	19404	-	< NCTC, 1920 < M. Robertson, Lister Institute, Watford, UK
VT002132	VT002132-10EA	<i>Cronobacter muytjensii</i>	00213	Vitroids	15-80	CECT	9143	51329	-	< CIP, 1992 < bioMérieux, La Balme-les-Grottes, France, 1983 < INSERM, Villeneuve d'Ascq, France
VT002136	VT002136-10EA	<i>Cronobacter muytjensii</i>	00213	Vitroids	1'000-10'000	CECT	9143	51329	-	< CIP, 1992 < bioMérieux, La Balme-les-Grottes, France, 1983 < INSERM, Villeneuve d'Ascq, France
VT002142	VT002142-10EA	<i>Cronobacter sakazakii</i>	00214	Vitroids	15-80	CECT	858	29544	-	< CCUG, 1983 < NCTC, 1982 < B. Holmes
VT002146	VT002146-10EA	<i>Cronobacter sakazakii</i>	00214	Vitroids	1'000-10'000	CECT	858	29544	-	< CCUG, 1983 < NCTC, 1982 < B. Holmes
VT000834	VT000834-10EA	<i>Enterobacter cloacae</i>	00083	Vitroids	130-300	CECT®	194	13047	-	< ATCC < CDC (Aerobacter cloacae)
VT000836	VT000836-10EA	<i>Enterobacter cloacae</i>	00083	Vitroids	1,000-10,000	CECT®	194	13047	-	< ATCC < CDC (Aerobacter cloacae)
VT000092	VT000092-10EA	<i>Enterococcus faecalis</i>	00009	Vitroids	15-80	CECT®	481	19433	-	< NCIMB < NCTC, 1950 < C.L. Hannay, NIRD, Reading, UK
VT000093	VT000093-10EA	<i>Enterococcus faecalis</i>	00009	Vitroids	80-130	CECT®	481	19433	-	< NCIMB < NCTC, 1950 < C.L. Hannay, NIRD, Reading, UK
VT000094	VT000094-10EA	<i>Enterococcus faecalis</i>	00009	Vitroids	130-300	CECT®	481	19433	-	< NCIMB < NCTC, 1950 < C.L. Hannay, NIRD, Reading, UK
VT000096	VT000096-10EA	<i>Enterococcus faecalis</i>	00009	Vitroids	1,000-10,000	CECT®	481	19433	-	< NCIMB < NCTC, 1950 < C.L. Hannay, NIRD, Reading, UK
VT000877	VT000877-10EA	<i>Enterococcus faecalis</i>	00087	Vitroids	50,000-150,000	CECT®	795	29212	-	< CCTM < ATCC < Micro-media Systems Inc. < Kaiser-Permanente
VT000097	VT000097-10EA	<i>Enterococcus faecalis</i>	00009	Vitroids	50,000-150,000	CECT®	481	19433	-	< NCIMB < NCTC, 1950 < C.L. Hannay, NIRD, Reading, UK
VT000872	VT000872-10EA	<i>Enterococcus faecalis</i>	00087	Vitroids	15-80	CECT®	795	29212	-	< CCTM < ATCC < Micro-media Systems Inc. < Kaiser-Permanente
VT000873	VT000873-10EA	<i>Enterococcus faecalis</i>	00087	Vitroids	80-130	CECT®	795	29212	-	< CCTM < ATCC < Micro-media Systems Inc. < Kaiser-Permanente
VT000876	VT000876-10EA	<i>Enterococcus faecalis</i>	00087	Vitroids	1,000-10,000	CECT®	795	29212	-	< CCTM < ATCC < Micro-media Systems Inc. < Kaiser-Permanente
VT000105	VT000105-10EA	<i>Enterococcus faecium</i>	00010	Vitroids	1,000-10,000	CECT®	410	19434	-	< NCTC, 1946 < A. Grumbach
VT000122	VT000122-10EA	<i>Escherichia coli</i>	00012	Vitroids	15-80	CECT®	516	8739	-	< NCIMB, 1953 < ATCC < I.C. Gunsalus < G.C. Crooks

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VT000126	VT000126-10EA	<i>Escherichia coli</i>	00012	Vitroids	1,000-10,000	CECT®	516	8739	-	< NCIMB, 1953 < ATCC < I.C. Gunsalus < G.C. Crooks
VT000123	VT000123-10EA	<i>Escherichia coli</i>	00012	Vitroids	80-130	CECT®	516	8739	-	< NCIMB, 1953 < ATCC < I.C. Gunsalus < G.C. Crooks
VT000127	VT000127-10EA	<i>Escherichia coli</i>	00012	Vitroids	50,000-150,000	CECT®	516	8739	-	< NCIMB, 1953 < ATCC < I.C. Gunsalus < G.C. Crooks
VT000132	VT000132-10EA	<i>Escherichia coli</i>	00013	Vitroids	15-80	CECT®	434	25922	-	< ATCC < FDA < F. Schoenknecht
VT000133	VT000133-10EA	<i>Escherichia coli</i>	00013	Vitroids	80-130	CECT®	434	25922	-	< ATCC < FDA < F. Schoenknecht
VT000136	VT000136-10EA	<i>Escherichia coli</i>	00013	Vitroids	1,000-10,000	CECT®	434	25922	-	< ATCC < FDA < F. Schoenknecht
VT000137	VT000137-10EA	<i>Escherichia coli</i>	00013	Vitroids	50,000-150,000	CECT®	434	25922	-	< ATCC < FDA < F. Schoenknecht
VT000902	VT000902-10EA	<i>Escherichia coli</i>	00090	Vitroids	15-80	CECT®	515	11775	-	< NCTC, 1952 < F. Kauffmann
VT000904	VT000904-10EA	<i>Escherichia coli</i>	00090	Vitroids	130-300	CECT®	515	11775	-	< NCTC, 1952 < F. Kauffmann
VT000905	VT000905-10EA	<i>Escherichia coli</i>	00090	Vitroids	600-1400	CECT®	515	11775	-	< NCTC, 1952 < F. Kauffmann
VT000906	VT000906-10EA	<i>Escherichia coli</i>	00090	Vitroids	1,000-10,000	CECT®	515	11775	-	< NCTC, 1952 < F. Kauffmann
VT000907	VT000907-10EA	<i>Escherichia coli</i>	00090	Vitroids	50,000-150,000	CECT®	515	11775	-	< NCTC, 1952 < F. Kauffmann
VT001793	VT001793-10EA	<i>Escherichia coli</i>	00179	Vitroids	80-130	CECT®	8296	-	-	< CIP < K. Mooijman, Nat. Inst. Public Health and Environ., The Netherlands
VT001796	VT001796-10EA	<i>Escherichia coli</i>	00179	Vitroids	1,000-10,000	CECT®	8296	-	-	< CIP < K. Mooijman, Nat. Inst. Public Health and Environ., The Netherlands
VT002023	VT002023-10EA	<i>Escherichia coli</i>	00202	Vitroids	80-130	CECT®	9153	-	-	< CIP, 2015 < NCTC, 2007
VT002026	VT002026-10EA	<i>Escherichia coli</i>	00202	Vitroids	1,000-10,000	CECT®	9153	-	-	< CIP, 2015 < NCTC, 2007
VT000903	VT000903-10EA	<i>Escherichia coli</i>	00090	Vitroids	80-130	CECT®	515	11775	-	< NCTC, 1952 < F. Kauffmann
VT000143	VT000143-10EA	<i>Escherichia coli</i> 0157:H7 (non-toxigenic)	00014	Vitroids	80-130	CECT®	4972	700728	-	< NCTC, 2007 < Federal Public Health, Austria
VT000146	VT000146-10EA	<i>Escherichia coli</i> 0157:H7 (non-toxigenic)	00014	Vitroids	1,000-10,000	CECT®	4972	700728	-	< NCTC, 2007 < Federal Public Health, Austria
VT072767	VT072767-10EA	<i>Fluoribacter bozemanæ</i>	-	Vitroids	>100,000	CECT®	7276	33217	-	< CIP < F. Grimont, Inst. Pasteur, Paris, France < CNR Legionella, Lyon, France < R.M. McKinney: strain WIGA < J.E. McDade
VT001752	VT001752-10EA	<i>Klebsiella aerogenes</i> (former <i>Enterobacter aerogenes</i>)	00175	Vitroids	15-80	CECT®	684	13048	-	< DSMZ < ATCC < CDC (<i>Aerobacter aerogenes</i>)
VT001753	VT001753-10EA	<i>Klebsiella aerogenes</i> (former <i>Enterobacter aerogenes</i>)	00175	Vitroids	80-130	CECT®	684	13048	-	< DSMZ < ATCC < CDC (<i>Aerobacter aerogenes</i>)
VT001754	VT001754-10EA	<i>Klebsiella aerogenes</i> (former <i>Enterobacter aerogenes</i>)	00175	Vitroids	130-300	CECT®	684	13048	-	< DSMZ < ATCC < CDC (<i>Aerobacter aerogenes</i>)

Product Number	Material Number	Organism	WDCM Number	Brand	CFU Range	Culture Collection	Strain Number	ATCC	CMCC	History
VT001756	VT001756-10EA	<i>Klebsiella aerogenes</i> (former <i>Enterobacter aerogenes</i>)	00175	Vitroids	1,000-10,000	CECT®	684	13048	-	< DSMZ < ATCC < CDC (<i>Aerobacter aerogenes</i>)
VT000971	VT000971-10EA	<i>Klebsiella pneumoniae</i>	00097	Vitroids	15-80	CECT®	143	13883	-	< NCTC, 1955 < P.R. Edwards, 1955, Center for Disease Cotnrol (CDC), Atlanta, United States
VT000975	VT000975-10EA	<i>Klebsiella pneumoniae</i>	00097	Vitroids	1,000-10,000	CECT®	143	13883	-	< NCTC, 1955 < P.R. Edwards, 1955, Center for Disease Cotnrol (CDC), Atlanta, United States
VT000153	VT000153-10EA	<i>Lactobacillus sakei</i> subsp. <i>sakei</i>	00015	Vitroids	80-130	CECT®	906	15521	-	< NCFB, 1983 < ATCC < K. Kitahara
VT000163	VT000163-10EA	<i>Lactococcus lactis</i> subsp. <i>Lactis</i>	00016	Vitroids	80-130	CECT®	185	9936/19435	-	< NCIMB, 1985 < NCTC, 1941 < P.M.F. Shattock
VT000167	VT000167-10EA	<i>Lactococcus lactis</i> subsp. <i>lactis</i>	00016	Vitroids	50,000-150,000	CECT®	185	9936/19435	-	< NCIMB, 1985 < NCTC, 1941 < P.M.F. Shattock
VT000157	VT000157-10EA	<i>Latilactobacillus sakei</i> subsp. <i>Sakei</i>	00015	Vitroids	50,000-150,000	CECT®	906	15521	-	< NCFB, 1983 < ATCC < K. Kitahara
VT001063	VT001063-10EA	<i>Legionella anisa</i>	00106	Vitroids	80-130	CECT®	8177	35292	-	< BCRC < ATCC, 1987 < G.W. Gorman WA-316-C3
VT001066	VT001066-10EA	<i>Legionella anisa</i>	00106	Vitroids	1,000-10,000	CECT®	8177	35292	-	< BCRC < ATCC, 1987 < G.W. Gorman WA-316-C3
VT001067	VT001067-10EA	<i>Legionella anisa</i>	00106	Vitroids	≥100,000	CECT®	8177	35292	-	< BCRC < ATCC, 1987 < G.W. Gorman WA-316-C3
VT001807	VT001807-10EA	<i>Legionella pneumophila</i>	00180	Vitroids	>100,000	CECT®	8343	33156	-	< CCUG < NCTC < R.E. Weaver, CDC, USA < P. Edelstein
VT002057	VT002057-10EA	<i>Legionella pneumophila</i> (serogroup 1)	00205	Vitroids	>50,000	CECT®	8734	-	-	< NCTC, 2003
VT001073	VT001073-10EA	<i>Legionella pneumophila</i> serogroup 1	00107	Vitroids	80-130	CECT®	7109	33152	-	< CIP, 1993 < C. Tram, Inst. Pasteur, Paris, France < ATCC < R.E. Weaver, CDC: strain Philadelphia 1 < J.E. McDade
VT001076	VT001076-10EA	<i>Legionella pneumophila</i> serogroup 1	00107	Vitroids	1,000-10,000	CECT®	7109	33152	-	< CIP, 1993 < C. Tram, Inst. Pasteur, Paris, France < ATCC < R.E. Weaver, CDC: strain Philadelphia 1 < J.E. McDade
VT001803	VT001803-10EA	<i>Legionella pneumophila</i> subsp. <i>fraseri</i> serovar 4	00180	Vitroids	80-130	CECT®	8343	33156	-	< CCUG < NCTC < R.E. Weaver, CDC, USA < P. Edelstein
VT001806	VT001806-10EA	<i>Legionella pneumophila</i> subsp. <i>fraseri</i> serovar 4	00180	Vitroids	1,000-10,000	CECT®	8343	33156	-	< CCUG < NCTC < R.E. Weaver, CDC, USA < P. Edelstein
VT000176	VT000176-10EA	<i>Listeria innocua</i> serotype 6a	00017	Vitroids	1,000-10,000	CECT®	910	33090	-	< CCUG, 1984 < CIP, 1980 < SLCC < H. Seeliger
VT001092	VT001092-10EA	<i>Listeria monocytogenes</i> serovar 1/2a	00109	Vitroids	15-80	CECT®	5873	35152	-	< CIP < H. Seeliger, Würzburg, Germany (1954)
VT001093	VT001093-10EA	<i>Listeria monocytogenes</i> serovar 1/2a	00109	Vitroids	80-130	CECT®	5873	35152	-	< CIP < H. Seeliger, Würzburg, Germany (1954)
VT001096	VT001096-10EA	<i>Listeria monocytogenes</i> serovar 1/2a	00109	Vitroids	1,000-10,000	CECT®	5873	35152	-	< CIP < H. Seeliger, Würzburg, Germany (1954)
VT000212	VT000212-10EA	<i>Listeria monocytogenes</i> serovar 4b	00021	Vitroids	15-80	CECT®	935	13932	-	< CIP, 1959 < H. Seeliger
VT000216	VT000216-10EA	<i>Listeria monocytogenes</i> serovar 4b	00021	Vitroids	1,000-10,000	CECT®	935	13932	-	< CIP, 1959 < H. Seeliger
VT000217	VT000217-10EA	<i>Listeria monocytogenes</i> serovar 4b	00021	Vitroids	50,000-150,000	CECT®	935	13932	-	< CIP, 1959 < H. Seeliger

Product Number	Material Number	Organism	WDCM Number	Brand	CFU Range	Culture Collection	Strain Number	ATCC	CMCC	History
VT000213	VT000213-10EA	<i>Listeria monocytogenes</i> serovar 4b	00021	Vitroids	80-130	CECT®	935	13932	-	< CIP, 1959 < H. Seeliger
VT001813	VT001813-10EA	<i>Mucor racemosus</i>	00181	Vitroids	80-130	CECT®	20821	42647	-	< CBS, 1969 < Hadlok, R.
VT000232	VT000232-10EA	<i>Proteus mirabilis</i>	00023	Vitroids	15-80	CECT®	4168	29906	-	< DSMZ < ATCC < CDC
VT000233	VT000233-10EA	<i>Proteus mirabilis</i>	00023	Vitroids	80-130	CECT®	4168	29906	-	< DSMZ < ATCC < CDC
VT000237	VT000237-10EA	<i>Proteus mirabilis</i>	00023	Vitroids	50,000-150,000	CECT®	4168	29906	-	< DSMZ < ATCC < CDC
VT000243	VT000243-10EA	<i>Pseudomonas aeruginosa</i>	00024	Vitroids	80-130	CECT®	110	10145	-	< NCIMB < ATCC < F. Kavanagh < Merck, Sharp and Dohme
VT000244	VT000244-10EA	<i>Pseudomonas aeruginosa</i>	00024	Vitroids	130-300	CECT®	110	10145	-	< NCIMB < ATCC < F. Kavanagh < Merck, Sharp and Dohme
VT000246	VT000246-10EA	<i>Pseudomonas aeruginosa</i>	00024	Vitroids	1,000-10,000	CECT®	110	10145	-	< NCIMB < ATCC < F. Kavanagh < Merck, Sharp and Dohme
VT000256	VT000256-10EA	<i>Pseudomonas aeruginosa</i>	00025	Vitroids	1,000-10,000	CECT®	108	27853	-	< ATCC < A.A. Medeiros
VT000257	VT000257-10EA	<i>Pseudomonas aeruginosa</i>	00025	Vitroids	50,000-150,000	CECT®	108	27853	-	< ATCC < A.A. Medeiros
VT001142	VT001142-10EA	<i>Pseudomonas aeruginosa</i>	00114	Vitroids	15-80	CECT®	118	25668	-	< NCTC, 1969 < P.M. Waterworth, 1968, Dep. of Bacteriology, Royal Postgraduate Medical School (RPMS), London, United Kingdom
VT001143	VT001143-10EA	<i>Pseudomonas aeruginosa</i>	00114	Vitroids	80-130	CECT®	118	25668	-	< NCTC, 1969 < P.M. Waterworth, 1968, Dep. of Bacteriology, Royal Postgraduate Medical School (RPMS), London, United Kingdom
VT001145	VT001145-10EA	<i>Pseudomonas aeruginosa</i>	00114	Vitroids	1,000-10,000	CECT®	118	25668	-	< NCTC, 1969 < P.M. Waterworth, 1968, Dep. of Bacteriology, Royal Postgraduate Medical School (RPMS), London, United Kingdom
VT001153	VT001153-10EA	<i>Pseudomonas fluorescens</i>	00115	Vitroids	80-130	CECT®	378	13525	-	< NCIMB < M.E. Rhodes, 1951
VT001156	VT001156-10EA	<i>Pseudomonas fluorescens</i>	00115	Vitroids	1,000-10,000	CECT®	378	13525	-	< NCIMB < M.E. Rhodes, 1951
VT001163	VT001163-10EA	<i>Pseudomonas fragi</i>	00116	Vitroids	80-130	CECT®	446	4973	-	< NCIMB, 1955 < ATCC, 1952 < B.W. Hammer
VT000262	VT000262-10EA	<i>Pseudomonas paraaeruginosa</i> (formerly <i>Pseudomonas aeruginosa</i>)	00026	Vitroids	15-80	CECT®	111	9027	-	< NCIMB < ATCC < C.P. Hegarty
VT000263	VT000263-10EA	<i>Pseudomonas paraaeruginosa</i> (formerly <i>Pseudomonas aeruginosa</i>)	00026	Vitroids	80-130	CECT®	111	9027	-	< NCIMB < ATCC < C.P. Hegarty
VT000264	VT000264-10EA	<i>Pseudomonas paraaeruginosa</i> (formerly <i>Pseudomonas aeruginosa</i>)	00026	Vitroids	130-300	CECT®	111	9027	-	< NCIMB < ATCC < C.P. Hegarty
VT000266	VT000266-10EA	<i>Pseudomonas paraaeruginosa</i> (formerly <i>Pseudomonas aeruginosa</i>)	00026	Vitroids	1,000-10,000	CECT®	111	9027	-	< NCIMB < ATCC < C.P. Hegarty

Product Number	Material Number	Organism	WDCM Number	Brand	CFU Range	Culture Collection	Strain Number	ATCC	CMCC	History
VT000267	VT000267-10EA	<i>Pseudomonas paraaeruginosa</i> (formerly <i>Pseudomonas aeruginosa</i>)	00026	Vitroids	50,000-150,000	CECT®	111	9027	-	< NCIMB < ATCC < C.P. Hegarty
VT000583	VT000583-10EA	<i>Saccharomyces cerevisiae</i>	00058	Vitroids	80-130	CECT	1383	9763	-	< NCYC, 1947 < ATCC < NRRL < Wickerham, L.J.
VT000292	VT000292-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Abony</i>	00029	Vitroids	15-80	CECT®	545	BAA-2162	-	< NCTC, 1940 < F. Kauffmann, Statens Serum Institut, Copenhagen, Denmark < K. Rauss, Budapest, Hungary
VT000302	VT000302-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Enteritidis</i>	00030	Vitroids	15-80	CECT®	4300	13076	-	< CIP, 1986 < ATCC < CDC
VT000303	VT000303-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Enteritidis</i>	00030	Vitroids	80-130	CECT®	4300	13076	-	< CIP, 1986 < ATCC < CDC
VT000306	VT000306-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Enteritidis</i>	00030	Vitroids	1,000-10,000	CECT®	4300	13076	-	< CIP, 1986 < ATCC < CDC
VT000307	VT000307-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Enteritidis</i>	00030	Vitroids	50,000-150,000	CECT®	4300	13076	-	< CIP, 1986 < ATCC < CDC
VT000312	VT000312-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i>	00031	Vitroids	15-80	CECT®	4594	14028	-	< NCTC < CDC (<i>Salmonella typhimurium</i>)
VT000313	VT000313-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i>	00031	Vitroids	80-130	CECT®	4594	14028	-	< NCTC < CDC (<i>Salmonella typhimurium</i>)
VT000316	VT000316-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i>	00031	Vitroids	1,000-10,000	CECT®	4594	14028	-	< NCTC < CDC (<i>Salmonella typhimurium</i>)
VT000317	VT000317-10EA	<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i>	00031	Vitroids	50,000-150,000	CECT®	4594	14028	-	< NCTC < CDC (<i>Salmonella typhimurium</i>)
VT000357	VT000357-10EA	<i>Staphylococcus aureus</i>	00035	Vitroids	50,000-150,000	CECT®	59	9144	-	< NCIMB < NCTC, 1944 < N.G. Heatley
VT000322	VT000322-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00032	Vitroids	15-80	CECT®	239	6538	26003	< NCIMB, 1964 < T.G. Mitchell < Diversey (UK) Ltd. < Diversey Corp., Chicago, USA < ATCC < FDA < AMC
VT000323	VT000323-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00032	Vitroids	80-130	CECT®	239	6538	26003	< NCIMB, 1964 < T.G. Mitchell < Diversey (UK) Ltd. < Diversey Corp., Chicago, USA < ATCC < FDA < AMC
VT000324	VT000324-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00032	Vitroids	130-300	CECT®	239	6538	26003	< NCIMB, 1964 < T.G. Mitchell < Diversey (UK) Ltd. < Diversey Corp., Chicago, USA < ATCC < FDA < AMC
VT000326	VT000326-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00032	Vitroids	1,000-10,000	CECT®	239	6538	26003	< NCIMB, 1964 < T.G. Mitchell < Diversey (UK) Ltd. < Diversey Corp., Chicago, USA < ATCC < FDA < AMC
VT000327	VT000327-10EA	<i>Staphylococcus aureus</i> subsp. <i>Aureus</i>	00032	Vitroids	50,000-150,000	CECT®	239	6538	26003	< NCIMB, 1964 < T.G. Mitchell < Diversey (UK) Ltd. < Diversey Corp., Chicago, USA < ATCC < FDA < AMC
VT000342	VT000342-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00034	Vitroids	15-80	CECT®	435	25923	-	< ATCC < FDA < F. Schoenknecht
VT000343	VT000343-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00034	Vitroids	80-130	CECT®	435	25923	-	< ATCC < FDA < F. Schoenknecht
VT000346	VT000346-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00034	Vitroids	1,000-10,000	CECT®	435	25923	-	< ATCC < FDA < F. Schoenknecht
VT000347	VT000347-10EA	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	00034	Vitroids	50,000-150,000	CECT®	435	25923	-	< ATCC < FDA < F. Schoenknecht

Product Number	Material Number	Organism	WDCM Number	Brand	CFU Range	Culture Collection	Strain Number	ATCC	CMCC	History
VT000366	VT000366-10EA	<i>Staphylococcus epidermidis</i>	00036	Vitroids	1,000-10,000	CECT®	231	12228	-	< NCIMB < ATCC < FDA (Micrococcus pyogenes var. Albus)
VT001596	VT001596-10EA	<i>Staphylococcus saprophyticus</i>	00159	Vitroids	1,000-10,000	CECT®	235	15305	-	< DSMZ < CCM < NCTC, 1947 < S.T. Cowan (Staphylococcus albus), S-41, Manchester Univ., United Kingdom
VT001597	VT001597-10EA	<i>Staphylococcus saprophyticus</i>	00159	Vitroids	50,000-150,000	CECT®	235	15305	-	< DSMZ < CCM < NCTC, 1947 < S.T. Cowan (Staphylococcus albus), S-41, Manchester Univ., United Kingdom
VT001823	VT001823-10EA	<i>Wallemia mellicola</i> (formerly <i>Wallemia sebi</i>)	00182	Vitroids	80-130	CECT®	20820	42694	-	(Wallemia sebi) < FRR < J. I. Pitt

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