

Certificate of Analysis



Certificate of Analysis ID: 1102750500_VM1039475_EN

Producer and client: Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany

Test laboratory: Merck KGaA Qualitätskontrolle für mikrobiologische Produkte
Frankfurter Str. 250, 64293 Darmstadt, Germany

Sample identification: GranuCult®
VRBD (Violet Red Bile Dextrose) Agar acc. EP, USP, JP and
ISO 21528

Ordering number: 1.10275.0500

Lot number: VM1039475

Sample ID: 201347344

Accreditation:



Test method: DIN EN ISO 11133:2020
Performance testing of solid culture media:
Quantitative method (poured plate technique)
Qualitative method (streaking method)

Date of analysis: 2023/01/25

Date of release: 2023/02/24

Minimum shelf life: 2028/01/31

Composition (g/l): Pancreatic digest of gelatin (Enzymatic digest of animal tissue) 7.0;
Yeast extract 3.0; Sodium chloride 5.0; D(+)Glucose 10.0; Bile salts
1.5; Neutral red 0.03; Crystal violet 0.002; Agar-agar 13.0.

Preparation & sterilization: Dissolve 39.5 g in 1 liter of purified water. Heat in boiling water and
agitate frequently until completely dissolved. Afterwards do not boil for
more than 2 minutes. Do not autoclave. Do not overheat.

Application: For the detection and enumeration of Enterobacteriaceae from food and
animal feed and other materials and bile-tolerant Gram-negative
bacteria from pharmaceutical and other materials.

Storage: Store at +15 °C to +25 °C, dry and tightly closed. Do not use clumped
or discolored medium. Protect from UV light (including sun light).

The reported results refer exclusively to the specified medium, see Certificate of Analysis ID.

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Physical parameters	Specification	Lot value
Appearance (clarity):	clear	clear
Appearance (color):	red	red
pH-value (25 °C):	7.2 – 7.6	7.4
Solidification behaviour (2 h at 45 °C)	liquid	liquid

Microbiological Performance

Quantitative method for solid media (poured plate techniques)

Test strain	Specification	Reference CFU	Test CFU	Recovery rate	Typical reaction
Escherichia coli ATCC® 8739 [WDCM 00012]	≥ 50 %	227	190	84 %	passes test pink to red colonies with or without precipitation halo
Escherichia coli ATCC® 25922 [WDCM 00013]	≥ 50 %	289	268	93 %	passes test pink to red colonies with or without precipitation halo
Salmonella typhimurium ATCC® 14028 (WDCM 00031)	≥ 50 %	202	207	102 %	passes test pink to red colonies with or without precipitation halo
Salmonella enteritidis ATCC® 13076 (WDCM 00030)	≥ 50 %	178	136	76 %	passes test pink to red colonies with or without precipitation halo

Qualitative method (streaking method)

Test strain	Specification	Growth
Enterococcus faecalis ATCC® 19433 [WDCM 00009]	total inhibition	total inhibition
Enterococcus faecalis ATCC® 29212 [WDCM 00087]	total inhibition	total inhibition

Incubation: 24 ± 2 hours at 37 ± 1 °C aerobic

Reference medium: Tryptic Soy Agar

A recovery rate of 50 % is equivalent to a productivity rate of 0.5.

The indicated colony counts result from the sum of a triple determination.



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Test strain	Specification	Reference 10 – 100 CFU	Test CFU	Recovery rate	Typical reaction
Escherichia coli* ATCC® 8739 [WDCM 00012]	50 – 150 %	82	79	96 %	passes test red colonies with precipitate
Pseudomonas aeruginosa* ATCC® 9027 [WDCM 00026]	50 – 150 %	74	58	78 %	passes test nearly colorless to slightly red colonies

Incubation: up to 18 hours at 30 – 35 °C aerobic

Test strain	Specification	Growth
Staphylococcus aureus* ATCC® 6538 [WDCM 00032]	no growth	no growth
Bacillus cereus* ATCC® 11778 [WDCM 00001]	no growth	no growth

Incubation: at least 24 hours at 30 – 35 °C aerobic

Reference medium: Tryptic Soy Agar

Parameters marked with an asterisk have not been tested by an accredited method.

Release: Culture medium released by Approving Officer or delegate LS-OII-QS6

Dr. Stefanie Fischer

Responsible Manager of LS-OII-QS6 (Test Laboratory D-PL-15185-01-00)

Certificate of analysis revision history:

Certificate version	Date	Status	Reason for version
01	2023/02/24	effective	Initial version