

Technical Data Sheet

GranuCult® plus Standard I Nutrient agar

Ordering number: 1.03864.0500

For the cultivation of fastidious microorganisms from food and animal feed, water and other samples. This culture medium can also be used for enumeration, isolation and enrichment of bacteria. It can also serve as high-grade base for the preparation of special culture media by adding blood, ascites fluid, serum or other enrichment.

Mode of Action

This culture medium contains peptone and yeast extract for providing nitrogen, vitamins, amino acids and carbon sources. Glucose is an additional carbon source, sodium chloride maintains the osmotic balance and agar is the solidifying agent.

Typical Composition

GranuCult® plus Standard I Nutrient agar	
Peptones	15.0 g/l
Yeast extract	3.0 g/l
Sodium chloride	6.0 g/l
D(+)Glucose	1.0 g/l
Agar-agar*	12.0 g/l
Water	n/a
pH at 25 °C	7.5 ± 0.2

* Agar-Agar is equivalent to other different terms of agar.

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Preparation

Dissolve 37.0 g in 1 liter of purified water. Heat in boiling water and agitate frequently until completely dissolved. Autoclave (15 minutes at 121 °C). Pour to plates.

The dehydrated medium is a granulate with beige color.

The prepared medium is clear to slightly opalescent and yellowish-brown. The pH value at 25 °C is in the range of 7.3 - 7.7.

Before inoculation, allow the prepared medium to equilibrate at room temperature if it was stored at a lower temperature.

There should be no visible moisture on the plates before use. When moisture is present, the plates should be dried for the minimum time required to remove visible moisture, following the procedure as described by EN ISO 11133.

Experimental Procedure and Evaluation

Depend on the purpose for which the medium is used.

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). For *in vitro* use only.

Microbiological Performance

Test method: Quantitative method (surface plate technique by spiral plater)

Test strain	Specification	
	Inoculum	Recovery rate
<i>Staphylococcus aureus</i> ATCC® 25923 [WDCM 00034]	≤ 100 cfu	≥ 70 %
<i>Listeria monocytogenes</i> ATCC® 13932 [WDCM 00021]	≤ 100 cfu	≥ 70 %
<i>Enterococcus faecalis</i> ATCC® 19433 (WDCM 00009)	≤ 100 cfu	≥ 70 %
<i>Escherichia coli</i> ATCC® 25922 [WDCM 00013]	≤ 100 cfu	≥ 70 %
<i>Shigella flexneri</i> ATCC® 12022 [WDCM 00126]	≤ 100 cfu	≥ 70 %

Incubation: 24 ± 2 h at 37 ± 1 °C, aerobic.

Reference medium: Tryptic soy agar.

Please refer to the actual batch related Certificate of Analysis.



Escherichia coli ATCC 25922
[WDCM 00013]
on Standard I Nutrient agar

Ordering Information

Product	Cat. No.	Pack size
GranuCult® plus Standard I Nutrient agar	1038640500	500 g
GranuCult® prime Tryptic Soy Agar acc. EP, USP, ISO and FDA-BAM	1054580500	500 g

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