

Technical Data Sheet

GranuCult® plus Blood agar (BA) (base)

Ordering number: 1.03879.0500

For the cultivation of fastidious microorganisms from different materials and for the determination of hemolytic reactions after addition of defibrinated blood.

This culture medium complies with the specifications given by APHA.

Mode of Action

This culture medium represents a rich nutrient base, which provides optimal growth conditions for a wide range of microorganisms. When using it with the addition of defibrinated blood, the pH value of 6.8 stabilizes the red blood corpuscles and favours the formation of clear haemolysis zones

It contains heart extract and peptones providing nitrogen, carbon, amino acids and vitamins. Sodium chloride maintains the osmotic balance and agar is the solidifying agent.

Typical Composition

APHA specifies no composition for Blood agar (BA) (base).

GranuCult® plus Blood agar (BA) (base)	
Nutrient substrate (heart extract and peptones)	20.0 g/l
Sodium chloride	5.0 g/l
Agar-agar*	15.0 g/l
Water	n/a
pH at 25 °C	6.8 ± 0.2

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

Preparation

Dissolve 40.0 g in 1 liter of purified water. Heat in boiling water and agitate frequently until completely dissolved. Autoclave (15 minutes at 121 °C).

Cool to 45-50 °C; add 5-8% sterile defibrinated blood and mix taking care to avoid bubble formation. Pour to plates.

The dehydrated medium is a granulate with beige color.

The prepared medium is clear to slightly opalescent and red. The pH value at 25 °C is in the range of 6.6 - 7.0.

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.

Inoculate and incubate as directed by the method 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: Performance testing of solid culture media - Qualitative testing with addition of 7 % defibrinated sheep blood.

Test strain	Specification	
	Growth	Haemolysis
<i>Streptococcus pneumoniae</i> ATCC® 6301	good	alpha (α)
<i>Bacillus cereus</i> ATCC® 11778 [WDCM 00001]	good	beta (β)
<i>Listeria monocytogenes</i> ATCC® 13932 [WDCM 00021]	good	beta (β) (weak)
<i>Clostridium perfringens</i> ATCC® 13124 [WDCM 00007]	good	beta (β)
<i>Listeria innocua</i> ATCC® 33090 [WDCM 00017]	good	no haemolysis
<i>Enterococcus faecalis</i> ATCC® 19433 [WDCM 00009]	good	no haemolysis

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

Clostridium perfringens: 24 ± 2 hours at 37 ± 1 °C, anaerobic.

Please refer to the actual batch related Certificate of Analysis.

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Literature

APHA (2015) Chapter No. 67: Microbiological media, reagents and stains. Compendium of Methods for the Microbiological Examination of Foods. 5th ed. American Public Health Association, Washington, D.C.

EN ISO International Standardisation Organisation. Microbiology of food, animal feed and water - Preparation, production, storage and performance testing of culture media + Amendment 1 + Amendment 2. EN ISO 11133:2014/Amd1:2018/Amd2:2020.

Ordering Information

Product	Cat. No.	Pack size
GranuCult® plus Blood agar (BA) (base)	1.03879.0500	500 g