
Blood Agar Base No. 2

Intended Use

For the isolation and cultivation of various fastidious microorganisms. After addition of blood, medium permits maximum recovery of Streptococci, Pneumococci and other fastidious pathogenic microorganisms without interfering with their haemolytic reactions.

Typical Composition (g/litre)

Peptone 15.0; HL extract # 2.5; Yeast extract 5.0; Sodium chloride 5.0;

Agar 15.0

Mode of Action

This culture medium represents a rich nutrient base, which provides optimal growth conditions for all relevant microorganisms.

Fresh, defibrinated sheep blood is most suitable for determining haemolysis forms. Boiled blood agar (chocolate agar) is an extremely rich culture medium and can be prepared by heating after the blood has been added.

If the culture medium base is to be used without blood, the pH should, however, be adjusted to 7.2 to 7.4 since most bacterial colonies appear somewhat earlier and grow better in a slightly alkaline medium.

Preparation

Suspend 21.25 grams in 500 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45 - 50°C and aseptically add 7% v/v sterile defibrinated blood. Final pH (at 25°C) 7.4±0.2

Storage

Store between 15- 30°C in a tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Specimen

Clinical material: blood and other pathological material; food samples. Clinical specimen

Collection, handling and processing, see general instructions of use.

Experimental Procedure and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.



Streptococcus pyogenes

Quality Control

Organism	Inoculum	Growth w/o Blood	Growth w Blood	Hemolysis
Neisseria meningitidis ATCC 13090	50 - 100	Fair	Luxuriant	None
Staphylococcus aureus ATCC 25923	50 - 100	Good	Luxuriant	β
Streptococcus pneumoniae ATCC 6303	50 - 100	Fair-Good	Luxuriant	α
Streptococcus pyogenes ATCC 19615	50 - 100	Fair-Good	Luxuriant	β

Reference

1. Hunter D. and Kearns M., 1977, Brit. Vet. J., 133:486
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual Clinical Microbiology, 11th Edition. Vol. 1
3. Norton C. F., 1986, Microbiology, 2nd Edition, Addison-Wesley Publishing Company
4. American Public Health Association: Compendium of Methods for the Microbiological Examination of Foods. 3rd ed., 1992.