

Technical Data Sheet

C∈ Blood Agar Base No. 2

Ordering number: 1.10328.0500

For the isolation and cultivation of various fastidious microorganisms, especially of pathogenic species, and for establishing their forms of hemolysis.

IVD in vitro diagnosticum - For professional use only

Mode of Action

Liver hydrolysate, peptone and yeast extract provide nitrogen, carbon, amino acids and vitamins. The osmotic equilibrium is maintained by sodium chloride.

Supplementation with blood provides additional growth factors for fastidious microorganisms and is the basis for determining hemolytic reactions. Hemolytic patterns may vary with the source of animal blood or type of base medium used.

In a study of viability of streptococci, Snavely and Brahier found that sheep blood gave the clearest and most reliable colony and hemolysis characteristics at both 24 and 48 hours.

Typical Composition

Nutrient substrate (yeast extract, peptone, liver-hydrolysate)	23 g/l
NaCl	5 g/l
Agar-Agar	12 g/l

Preparation

Suspend 40 g in 1 I of demineralized water. Autoclave 15 min at 121 °C. Cool to 45-50 °C. Add 5-8 % of sterile defibrinated blood without bubbles (ensure adequate aeration of the blood). Mix gently and pour into plates.

Before adding blood the appearance of the prepared medium is clear and yellowish-brown, afterwards blood-colored and non-hemolytic.

The pH value at 25 °C is in the range of 7.2-7.6.

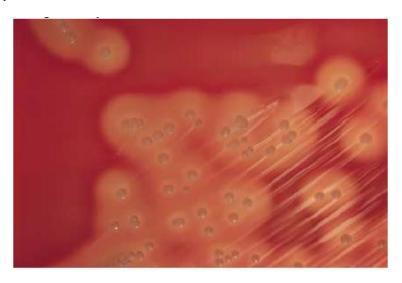
Experimental Procedure and Evaluation

Inoculate the plates.

Incubation: under optimal conditions usually 24 h at 35 °C aerobically (Clostridium perfringens anaerobically).



Investigate hemolytic reactions.



Storage

Usable up to the expiry date when stored dry and tightly closed at +15 to +25° C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25° C.

Specimen

e.g. Throat swabs, sputum, genital swabs.

Clinical specimen collection, handling and processing. See general instructions of use.

Quality Control

Control Strains	ATCC#	Incubation	Expected Results
Staphylococcus aureus	25923	24 h at 35 °C	Recovery on test medium ≥ 70 %
Streptococcus pyogenes	19615	24 h at 35 °C	Recovery on test medium ≥ 70 %, β-hemolysis, bacitracin test positive
Streptococcus pneumoniae	6305	24 h at 35 °C	Recovery on test medium ≥ 70 %, α-hemolysis
Streptococcus agalactiae	13813	24 h at 35 °C	Recovery on test medium ≥ 70 %, no hemolysis
Listeria monocytogens	19118	24 h at 35 °C	Recovery on test medium ≥ 70 %
Bacillus cereus	11778	24 h at 35 °C	Recovery on test medium ≥ 70 %, β-hemolysis
Clostridium perfringens	13124	24 h at 35 °C*	Recovery on test medium ≥ 70 %, β-hemolysis

^{*} anaerobic with Anaerocult® A

Please refer to the actual batch related Certificate of Analysis.



Literature

Waterworth, P. M. (1955): The stimulation and inhibition of the growth of *Haemophilus influenzae* on media containing blood. British Journal of Experimental Pathology. **36**: 186-194.

Snavely and Brahier. 1960. Am. J. Clin. Pathol. 33:511.

Ordering Information

Product	Cat. No.	Pack size
Blood Agar Base No. 2	1.10328.0500	500 g

Merck KGaA, 64271 Darmstadt, Germany Fax: +49 (0) 61 51 / 72-60 80 mibio@merckgroup.com www.merckmillipore.com/biomonitoring Find contact information for your country at: www.merckmillipore.com/offices
For Technical Service, please visit: www.merckmillipore.com/techservice

