Blood Agar Base | AS-1144

For preparing blood plates and boiled blood (Chocolate) plates used for the isolation and cultivation of various fastidious microorganisms, especially of pathogenic species, and for establishing their forms of hemolysis.

Blood Agar Base is a multipurpose culture medium that works well for a wide range of bacteria. It promotes distinct hemolysis zones when mixed with fresh, defibrinated sheep blood. Boiled blood can be added to make a nutrient-rich "chocolate agar."

Peptones supply vital nutrients, and blood improves growth factors for fastidious organisms and facilitates the visualization of hemolytic reactions.

The blood type used can affect the result; for example, sheep blood works best against Group A Streptococci but is not appropriate for treating Haemophilus haemolyticus, which needs horse blood.

Composition (gr/L)	
Peptone Meat	15
Heart Extract	5
Sodium Chloride	5
Agar	15
Final pH at 25°C	6.8 ± 0.2

Preparation

Dissolve 40 grams of the medium into a liter of deionized water. Stir well. Autoclave for 15 minutes at 121°C. Cool as soon as you can. Cool the base to 45–50°C before aseptically adding 5% of sterile, defibrinated blood to prepare blood agar. Mix thoroughly and pour into petri dishes.

Quality Control

Dehydrated Appearance: Free flowing, homogeneous, beige.
Prepared Appearance: Plain – Medium, yellow to tan, clear to slightly hazy. With 5% sheep blood – Cherry red, opaque.
Reaction of 4.0 % Solution at 25°C: pH 6.8 ± 0.2

Microbial Test Results

For 18 to 24 hours, incubate at 35 ± 2°C (Note that incubate *streptococci* with 3-5% CO2).

Organism (ATCC)	**Recovery**	**Hemolysis**
Escherichia coli (25922)	Good	Beta
Staphylococcus aureus (25923)	Good	Beta
Streptococcus pneumoniae (6305)	Good	Alpha
Candida albicans (10231)	Good	No hemolysis
Pseudomonas aeruginosa (27853)	Good	N/A**

** Not available

Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.