

Blood Agar Base

Catalog : HB6235-5

Blood Agar Base, with the addition of sterile blood, is used for the isolation, cultivation and detection of hemolytic activity of streptococci and other fastidious microorganisms.

Approximate Formula:

Ingredients	gm/liter
Pancreatic digest of casein	15.0
Soy peptone	5.0
Sodium chloride	5.0
Agar	13.0
Final pH 7.3±0.1 at 25 °C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 38.0g of the medium in one liter of deionized or distilled water. Heat with frequent agitation and boil for one minute. Boil for 1 minute. Sterilize in an autoclave at 121 °C (15 lbs.) for 15 minutes. Cool to 45-50 °C, add 5 to 10%(V/V) of sterile defibrinated sheep blood, mix carefully and pour into sterile petri dishes.

Principle and Interpretation:

Blood Agar Base is an all-purpose medium which has been used for many years as a base for the preparation of blood agars. Supplementation with blood (5-10%) 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.

Pancreatic digest of casein and provides Soy peptone provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients, which are necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of red transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Blood Agar Base must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1 °C for 24 hours.

Microorganism	Strains Number	Growth	Remarks
<i>Bacillus cereus</i>	ATCC 11778	luxuriant	β-Hemolytic ring around the Colonies
<i>Staphylococcus Aureus</i>	ATCC 6538	luxuriant	β-Hemolytic ring around the Colonies
Beta-hemolytic <i>Streptococcus</i>	CMCC 32210	luxuriant	β-Hemolytic ring around the Colonies
<i>Streptococcus pneumoniae</i>	ATCC 6305	luxuriant	α-Hemolytic ring around the Colonies

References:

1. Alper T. and Gillies N. E. (1960) J. Gen. Microbiol. 22 113-128.
2. Hodgkins Brenda and Alper T. (1963) J. Gen. Microbiol. 30 307-315.
3. GB4789.28-2013 People's Republic of China food safety national standard food microbiology test medium and reagent quality requirements.