

AZIDE BLOOD AGAR BASE

Selective basal medium for streptococci and staphylococci isolation from feces, waters and foods.

TYPICAL FORMULA (g/l)

Tryptospecial	18.0
Beef Extract	3.0
Sodium Chloride	5.0
Sodium Azide	0.2
Agar	15.0

Final pH = 7.2 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 41.2 g of powder in 1 liter of distilled or deionized water. Heat to boiling and shake until completely dissolved. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C and aseptically add 5% of sterile defibrinated horse or sheep blood. Mix well. Distribute in petri dishes.

DESCRIPTION

AZIDE BLOOD AGAR BASE is a selective medium for the isolation of streptococci and staphylococci from faeces, water and foods and other specimens contaminated by Gramnegative bacteria. The addition of blood makes it suitable to bring to evidence the haemolytic properties of streptococci. Sodium azide has a bacteriostatic effect on Gram-negative bacteria blocking the metalloporphyrinic enzymatic systems.

TECHNIQUE

Plate the material to examine on the surface of the solidified medium, or include it into the agar mass. Haemolysis in Azide Blood Agar plates appears as follows: α-haemolysis: green-brown halo, sometimes surrounded by a light zone; at an analysis with microscope the red cells appear discoloured but intact. β-haemolysis: transparent red halo.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: tan.

Prepared medium

Appearance: opaque.

Color: cherry red.

Incubation conditions: 36 ± 1 °C for 24 hours.

Microorganism	ATCC	Growth	Haemolysis
<i>Escherichia coli</i>	25922	none	
<i>Enterococcus faecalis</i>	19433	good	alpha/gamma
<i>Staphylococcus aureus</i>	25923	good	beta
<i>Staphylococcus epidermidis</i>	12228	good	gamma
<i>Streptococcus pneumoniae</i>	6303	good	alpha
<i>Streptococcus pyogenes</i>	19615	good	beta

PERFORMANCE AND LIMITATIONS

The identification of streptococci has to be confirmed by standard microscopic, biochemical and serological examination. Strains may be encountered that fail to grow or grow poorly on this medium.



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PRECAUTIONS

Azide Blood Agar Base contains sodium azide. This substance is harmful by inhalation and if swallowed, irritating to eyes, respiratory system and skin. Consult safety data sheet for further details. Sodium azide reacts with many metals, especially copper, to produce explosive metal azides.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8 °C.

REFERENCES

1. Snyder, M.L, and H.C. Lichstein. 1940. J. Infect. Dis. **67**:113.
2. Ruff, K.L. 1995. "Streptococcus", **17**, p.283-296. In Murray, Baron. Manual of clinical microbiology, 7th ed. American Society for Microbiology.
3. Isenberg, H.D. (ed.). 1992. Clinical microbiology procedures handbook, vol. 1. American society for microbiology, Washington D.C.

PRESENTATION












Product	REF	
AZIDE BLOOD AGAR BASE (12.1 l)	610153	500 g
AZIDE BLOOD AGAR BASE (2.4 l)	620153	100 g
SHEEP BLOOD DEFIBRINATED	83296	50 ml

TABLE OF SYMBOLS

 LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	 IVD <i>In Vitro</i> Diagnostic Medical Device
 REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	 Keep away from heat source



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