



Azide Blood Agar Base

Selective medium for detection of streptococci and staphylococci from clinical specimens and other materials.

Instructions For Use

ENGLISH

DESCRIPTION

Azide Blood Agar Base is a culture medium used for the detection and selective isolation of streptococci and staphylococci from stool, respiratory tract specimens, food and environmental samples with mixed flora.

With added blood the medium may be used for the determination of haemolytic reactions.

Other supplements may also be used for different purposes, e.g crystal violet for isolation of *Erysipelothrix rhusiopathiae* and *Streptococcus pneumoniae*.

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	

*Formula may be adjusted and/or supplemented as required to meet performance specifications;
Grams per litre of purified water.

METHOD PRINCIPLE

Tryptospecial and beef extract provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Sodium chloride maintains the osmotic balance of the medium. Sodium azide acts largely inhibits the growth of gram-negative bacteria while sparing enterococci, staphylococci and streptococci. It also prevents the swarming of *Proteus* spp. Agar is the solidifying agent.

The addition of blood serves as an additional source of growth factors and enables to differentiate microorganisms on the basis of haemolytic reactions. The haemolytic pattern or the degree of haemolysis may vary depending on the type of blood used and also if compared to the reactions on non-selective blood agar.

PREPARATION

Dehydrated medium Suspend 41.2 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes.

Medium in bottles Melt the content of the bottle in a water bath at 100°C (loosing the cap partially removed) until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down.

Cool to 45-50°C and aseptically add 5% horse or sheep blood. Mix well avoiding the formation of bubbles. Pour into Petri dishes.

NOTE It is appropriate to use the medium freshly prepared. The prepared medium should be kept refrigerated for no longer than 48 hours.

TEST PROCEDURE

For clinical use, inoculate by streaking the specimen onto the agar surface to obtain well isolated colonies.

For food and environmental samples, spread 0.1 ml of the initial suspension and/or appropriate dilutions onto the surface of the medium.

Incubate the inoculated plates inverted under appropriate atmosphere at 35 ± 2°C for 18-24 h. Examine for growth and haemolytic reactions. If necessary, extend incubation for up to 40-48 h.

INTERPRETING RESULTS

Observe for growth and haemolytic reactions.

Alpha-haemolysis: greenish discolouration of medium around the colony.

Beta-haemolysis: clear zone around or under the colony.

Gamma-haemolysis: no change.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed. Store bottles at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

Dehydrated medium: 4 years.

Medium in bottles: 2 years.

QUALITY CONTROL

Appearance of Dehydrated Medium: Free-flowing, homogeneous, beige.

Appearance of Prepared Medium: Amber, opalescent / With blood: Cherry red.

Expected Cultural Response:

Control strain		Incubation	Growth	Haemolysis
<i>Staphylococcus epidermidis</i>	ATCC® 12228	18-48 h / 35 ± 2°C	Good	Gamma
<i>Staphylococcus aureus</i>	ATCC® 25923		Good	Beta
<i>Enterococcus faecalis</i>	ATCC® 19433		Good	Alpha/Gamma
<i>Streptococcus pyogenes</i>	ATCC® 19615		Good	Beta
<i>Streptococcus pneumoniae</i>	ATCC® 6305		Good	Alpha
<i>Escherichia coli</i>	ATCC® 25922		Inhibited	---

Please refer to the actual batch related Certificate of Analysis (CoA).

WARNING AND PRECAUTIONS

For In Vitro Diagnostic use. For professional use only. Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

See the references at the end of this document.

TABLE OF SYMBOLS

See the table of symbols at the end of this document.

The products are available in the various configurations listed below. There may be additional product ref. numbers as well. For an updated listing of available products, visit liofilchem.com












Product	Format	Packaging	Ref.
Azide Blood Agar Base	Bottle	6 x 100 ml	402170
Azide Blood Agar Base	Bottle	6 x 200 ml	412150
Azide Blood Agar Base	Powder	100 g	620153
Azide Blood Agar Base	Powder	500 g	610153

This IFU document and the SDS are available from the online Support Center: liofilchem.com/ifu-sds

BIBLIOGRAPHY

1. P.R. Murray, E.J. Baron, J.H. Jorgensen, M.A. Pfaller, R.H. Tenenbaum, 8th Ed. (2003) Manual of Clinical Microbiology, ASM, Washington, D.C.
2. Isenberg, (Ed.) (1992) Clinical Microbiology Procedures Handbook, Vol. I., American Society for Microbiology, Washington, D.C.
3. Packer (1943) J. Bacteriol. 46:343.
4. Lichstein and Snyder (1941) J. Bacteriol., 42:653.
5. Snyder and Lichstein (1940) J. Infect. Dis., 67:113.
6. Edwards (1933) J. Comp. Pathol. Therap., 46:211.

TABLE OF SYMBOLS

	Batch code
	Catalogue number
	<i>In Vitro</i> Diagnostic Medical Device
	Manufacturer
	Use by
	Fragile, handle with care
	Temperature limitation
	Contains sufficient for <n> tests
	Consult Instruction For Use
	Do not reuse
	Keep away from light



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