

TM 668 – B.T.B. LACTOSE AGAR

INTENDED USE

For isolation of pathogenic Staphylococci.

PRODUCT SUMMARY AND EXPLANATION

Staphylococcus are known to be pathogenic to man and other mammals. Although this organism is frequently a part of the normal human microflora, it can cause significant opportunistic infections under appropriate conditions. Traditionally Staphylococci are divided into two groups on the basis of their ability to clot blood plasma (the coagulase reaction). The coagulase-positive Staphylococci constitute the most pathogenic species, *Staphylococcus aureus*. BTB Lactose Agar designed by Chapman et al, is used in the detection and isolation of pathogenic Staphylococci. On this media Staphylococci are differentiated by their ability to grow at a high pH and in the presence of bromothymol blue. Plates should be inoculated preferably by spread plate technique and incubated for about 36 hours at 35°C. Typical colonies appear deep yellow (90% approx.) or blue grey (10% approx.). Coliforms may grow but are differentiated by their appearance.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	5.000
Beef extract	3.000
Lactose	10.000
Bromo thymol blue	0.170
Agar	15.000

PRINCIPLE

Proteose peptone and beef extract serves as a source of carbon, nitrogen, long chain amino acids, vitamins and other essential nutrients. Lactose is the fermentable carbohydrate with bromothymol blue as an indicator.

INSTRUCTION FOR USE

- Dissolve 33.17 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to greenish yellow homogeneous free flowing powder.
Appearance of prepared medium	: Greenish blue coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 8.6±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	>=50%	Yellow	35-37°C	24-48 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Good-luxuriant	>=50%	Golden yellow	35-37°C	24-48 Hours
<i>Salmonella Typhi</i>	6539	50-100	Good-luxuriant	>=50%	Blue/colourless	35-37°C	24-48 Hours
<i>Staphylococcus aureus subsp. aureus</i>	6538	50-100	Good-luxuriant	>=50%	Golden yellow	35-37°C	24-48 Hours
<i>Staphylococcus epidermidis</i>	12228	50-100	Good-luxuriant	>=50%	Blue/colourless	35-37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.













DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Atlas R. M., 2004, Handbook of Microbiological Media, 3rd Edition, CRC Press.
2. Carney D. N., Fossieck B. E., Parker R. H. et al, 1982, Rev. Infect. Dis. H., 1-12.
3. Chapman, Lieb, Bereus and Curcio, 1937, J. Bacteriol., 33:533. Revision : 04 / 2019
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Barkstrasse 10, 49163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019