



LIM Broth

Selective enrichment medium for detection of Group-B Streptococci (GBS).

DESCRIPTION

LIM Broth (Todd Hewitt CNA Broth) is a liquid medium used for enrichment of *Streptococcus agalactiae* from sample material containing mixed bacterial flora.

This medium may be used for the cultivation of beta-haemolytic streptococci prior to perform serological studies.

TYPICAL FORMULA*

	(g/liter)
Beef Heart Infusion	3.1
Casein Peptone	20.0
Yeast Extract	10.0
Glucose	2.0
Sodium Chloride	2.0
Disodium Phosphate	0.4
Sodium Carbonate	2.5
Colistin Sulfate	0.01
Nalidixic Acid	0.015
Final pH 7.8 ± 0.2 at 25°C	

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

METHOD PRINCIPLE

Beef heart infusion and casein peptone provide nitrogen, carbon, amino acids and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of group-B. Glucose is the fermentable carbohydrate. In addition, it stimulates haemolysis formation. Sodium chloride maintains the osmotic balance of the medium. Disodium phosphate and sodium carbonate act as buffering agents. Colistin and nalidixic acid inhibit gram-negative bacteria.

TEST PROCEDURE

Inoculate a LIM Broth tube with the sample. Incubate with loosened cap aerobically or in CO₂-enriched atmosphere at 35 ± 2°C for 18-24 hours or up to 48 hours, if needed.

After an overnight incubation, observe tubes for the presence of turbidity compared to an uninoculated control. If negative, re-incubate and additional 24 hours before discarding. If broth is cloudy, subculture to Chromatic GBS (ref. 11639) or Blood Agar plate. Final identification should be confirmed by appropriate biochemical and/or serological tests.

In addition to subculture, LIM Broth may be used for agglutination tests. Results have been reported already after 5 hours of incubation.

APPEARANCE

Clear, amber.

STORAGE

Store at 2-8°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

2 years.

QUALITY CONTROL

To check the performance of the medium the following microbial strains can be used.

Strain	Inoculum	Incubation	Specification
<i>Streptococcus agalactiae</i>	ATCC® 12386	35 ± 2°C / 18-24 h	Good growth
<i>Enterococcus faecalis</i>	ATCC® 29212		Good growth
<i>Escherichia coli</i>	ATCC® 25922		Partial to total inhibition

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE








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

BIBLIOGRAPHY

1. PHE. UK Standards for Microbiology Investigations (2014) Detection method for Group B Streptococci.
2. Isenberg, H.D. (1992) Clinical microbiology procedures handbook, American society for microbiology, Washington DC.
3. Jones, D.E., E.M. Friedl, K.S. Kanarek, J.K. Williams, and D.V. Lim (1983) Rapid identification of of pregnant women heavily colonized with Group B Streptococci. J. Clin. Microbiol. 18:558-560.
4. Lim, D.V., K.S. Kanarek, and M.E. Peterson (1982) Magnitude of colonization and sepsis by Group B Streptococci in newborn infants. Current Microbiology 7:99-101.
5. Todd, E.W., and Hewitt L.F. (1932) Anew culture medium for the production of antigenic streptococcal haemolysin. J. Path. Bacteriol. 35: 973.

Product	Format	Packaging	Ref.
LIM Broth	16 x 100 mm Tube with internal shaped conical bottom and screw cap	100 x 2 mL tubes	85701

TABLE OF SYMBOLS

LOT Batch code	 Do not reuse	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Consult Instruction For Use	

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