

MYP AGAR BASE (PHENOL RED EGG YOLK POLYMYXIN AGAR BASE) TM 197

For isolation and identification of pathogenic Staphylococci and *Bacillus* species

Composition

Ingredients	Gms/Ltr.
Agar	15.00
Peptic digest of animal tissue	10.00
D-Mannitol	10.00
Sodium chloride	10.00
Meat extract	1.00
Phenol red	0.025

* Dehydrated powder, hygroscopic in nature, store in a dry place in tightly- sealed containers 25°C and protected from direct Sunlight.

Instructions for Use

Dissolve 46gms in 900ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize at 15psi (121°C) for 15 minutes. Cool to 40 - 45°C and aseptically add **POLYMYXIN B SELECTIVE SUPPLEMENT (TS 058)** to a final concentration of 100 ml. Add **EGG YOLK EMULSION (TS 002)** per 1000ml of medium. Mix well and pour into Petri plates.

Appearance: Red colored, clear to slightly opalescent gel. With the addition of Egg Yolk Emulsion, a light orange colored opaque gel forms in the Petri plates.

pH (at 25°C): 7.1 ± 0.2

Principle

MYP AGAR BASE (PHENOL RED EGG YOLK POLYMYXIN AGAR BASE) is used for the isolation and identification of pathogenic Staphylococci and *Bacillus* species. Medium contains Peptic digest of animal tissue which supply nitrogen. Mannitol fermentation can be detected with Phenol red, which results in a yellow color being present in the mannitol fermenting colonies. Sodium chloride provides the essential electrolytes in the medium. Agar is a solidifying agent. Egg Yolk Emulsion helps in the differentiation of lecithinase producing colonies, which are surrounded by a zone of white precipitate. The addition of polymyxin B supplement helps to restrict growth of gram negative bacteria.

Interpretation

Cultural characteristics observed after inoculating (10³CFU/ml), on incubation at 35 ± 2°C for 18 - 40 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Apperance of colony	Lecithinase activity (+ = haloes around the colonies)
<i>Bacillus subtilis</i>	6633	10 ³	Good	Yellow	Negative
<i>Bacillus cereus</i>	10876	10 ³	Good	Red	Positive
<i>Staphylococcus aureus</i>	25923	10 ³	Good	Yellow	Positive
<i>Escherichia coli</i>	25922	10 ³	Fair	----	----

References

1. Mossel, D.A. A., et al., Appl. Microbiol. 15,650. (1967).



PRODUCT DATA SHEET

2. Compendium of Methods for the Microbiological Examination of Foods, Vanderzant, C., et al., eds. 3rd Edition. APHA. Washington, D.C. (1992).
3. Murray, PR., E.J. Baron M.A. Pfaller F.C. Tenover and R.H. Tenover (ed). Manual of clinical microbiology, 6th edition. American Society for Microbiology, Washington DC. (1995).
4. MacFaddin, J *Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria* Baltimore. (1985).