

TMV 373 – ENDO AGAR BASE (VEG.)

INTENDED USE

For standard test of lactose fermenting coliforms.

PRODUCT SUMMARY AND EXPLANATION

This medium is prepared by replacing Peptic digest of animal tissue with Veg peptone that is free of BSE/TSE risk. Endo Agar(Veg) media are the modifications of Endo Agar media which was developed by Endo for differentiation of lactose fermenters and lactose non-fermenters. Endo Agar(Veg) media like Endo Agar media are used for microbiological examination of potable water and waste water, dairy products and food.

The selectivity of Endo Agar is due to Sodium sulfite / Basic fuchsin combination, which results in the suppression of gram positive organisms. Coliforms ferment the lactose, produce pink to rose red colonies and similar colouration of the medium. The colonies of organisms that do not ferment the lactose are colourless to faint against the pink background of the medium.

COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	10.000
Lactose	10.000
Dipotassium hydrogen phosphate	3.500
Sodium sulphite	2.500
Agar	12.000

PRINCIPLE

The medium consists of Veg peptone which provide nitrogen, carbon, vitamins and minerals required for bacterial growth. Sodium sulphite and basic fuchsin (FD) has inhibitory effect on gram-positive microorganisms. Lactose fermenting coliforms produce aldehyde and acid. The aldehyde in turn liberates fuchsin from the fuchsin-sulphite complex, giving rise to a red colouration of colonies. With *Escherichia coli*, this reaction is very pronounced as the fuchsin crystallizes, exhibiting a permanent greenish metallic lustre (fuchsin lustre) to the colonies.

INSTRUCTION FOR USE

- Dissolve 38.0 grams in 1000 ml purified / distilled water. Add 4 ml of 10% Basic Fuchsin.
 - Heat to boiling to dissolve the medium completely.
 - Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
 - Mix well before pouring into sterile Petri plates.
- Caution: Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Light purple coloured, homogeneous, free flowing powder that may contain a large amount of minute to small dark particles.

Appearance of prepared medium : Orangish pink coloured, clear to slightly opalescent gel with fine precipitate forms in petri plates.

pH (at 25°C) : 7.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	>70%	Pink, mucoid	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>70%	Pink to rose red with metallic sheen	35-37°C	18-24 Hours
<i>S. serotype Typhi</i>	6539	50-100	Luxuriant	>70%	Colourless to pale pink	35-37°C	18-24 Hours
<i>Shigella sonnei</i>	25931	50-100	Luxuriant	>70%	Colourless to pale pink	35-37°C	18-24 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Luxuriant	>70%	Pink, mucoid	35-37°C	18-24 Hours
<i>Proteus vulgaris</i>	13315	50-100	Luxuriant	>70%	Colourless to pale pink	35-37°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant	>70%	Colourless, irregular	35-37°C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	None-poor	<20%	Pink, small	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	>10 ³	Inhibited	0%	-	35-37°C	18-24 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. Endo, 1904, Zentralbl. Bakteri., Abt. I. Orig., 35:109.
2. Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed, APHA, Washington DC
3. Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.
4. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.

 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, 48163 Münster, 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**
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