

E5399 Endo Agar

Endo Agar is recommended for the detection of coliform and other enteric organisms. Endo Agar is used for the microbiological examination of potable water, waste water, dairy products and food.

Composition:

Ingredients	Grams/Litre
Peptic Digest of Animal Tissue	10.0
Lactose	10.0
Dipotassium Phosphate	3.5
Sodium Sulphite	2.5
Basic Fuchsin	0.5
Agar	15.0
Final pH 7.5 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Light purple colored, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Orangish pink colored, clear to slightly opalescent gel with fine precipitate forms in petri plates.

Directions:

Suspend 41.5 g of Endo Agar in 1000 ml of distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. Mix well before pouring into sterile petri plates. Note: Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.

Principle and Interpretation:

Sodium sulphite and basic fuchsin have an 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 red colonies. With *Escherichia coli*, this reaction is very pronounced as the fuchsin crystallizes.

Cultural characteristics after 18-24 hours at 35-37°C.

Organisms (ATCC)	Growth	Colonies
<i>Escherichia coli</i> (25922)	+++	pink to rose red with metallic sheen
<i>Klebsiella pneumoniae</i> (13883)	+++	pink, mucoid
<i>Pseudomonas aeruginosa</i> (27853)	+++	colorless, irregular
<i>Enterobacter aerogenes</i> (13048)	+++	pink, mucoid
<i>Enterococcus faecalis</i> (29212)	+/-	pink, small
<i>Salmonella typhi</i> (6539)	+++	colorless to pale pink
<i>Shigella sonnei</i> (25931)	+++	colorless to pale pink
<i>Proteus vulgaris</i> (13315)	+++	colorless to pale pink
<i>Staphylococcus aureus</i> (25923)	-	-



References:

1. A Standard Methods for the Examination of Water and Wastewater, (1985). Greenberg, A.E., et al., eds. 16th Edition. APHA. Washington, D.C.
2. Compendium of Methods for the Microbiological Examination of Foods, (1984). Speck, M. Ed. 3rd Edition. APHA. Washington D. C.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

The vibrant M, Millipore, and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. Detailed information on trademarks is available via publicly accessible resources.
© 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

