

TM 1879 – B12 CULTURE AGAR (E.coli Maintenance Medium) (E. coli Mutant Culture Agar)

INTENDED USE

For propagation, cultivation and maintenance of *E. Coli* mutant used in microbiological assay of Vitamin B12.

PRODUCT SUMMARY AND EXPLANATION

Escherichia coli mutant species grow poorly on non-selective culture media and require special nutrients for its growth. B12 Maintenance Media for *E. coli* mutant is recommended for supporting stock cultures to preserve the viability and sensitivity of the test organism for its intended purpose.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	5.000
Yeast extract	5.000
Liver extract	0.050
Sucrose	12.000
Potassium dihydrogen phosphate	0.500
Magnesium sulphate	0.200
Sodium chloride	0.100
Ferrous sulphate	0.001
Agar	15.000

PRINCIPLE

Tryptone is a source of carbon and nitrogen while yeast extract serves as the energy source as well as supplies B-complex vitamins. Sucrose is the fermentable carbohydrate, liver extract provides B-vitamins, potassium phosphate acts as a buffer and sodium chloride maintains the osmotic balance.

INSTRUCTION FOR USE

Dissolve 37.85 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 yellow coloured homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured slightly opalescent gel forms in tubes as slants.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	11105	50-100	Luxuriant	35-37°C	18-48 Hours

PACKAGING:

In pack size of 100 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. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. 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.
3. Kavanagh F., (1972), Analytical Microbiology, Academic Press, New York.

 Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

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