

TM 842 – ROBINSON MEDIUM FOR ENTAMOEBA (DOUBLE PACK)

INTENDED USE

Used as a substrate for growth of Amoeba by cultivating E.coli.

PRODUCT SUMMARY AND EXPLANATION

Entamoeba histolytica causes amoebiasis and is the only amoeba pathogenic for humans. Amoebic dysentery is an acute diarrhea with ulcerations of the colonic mucosa. A chronic form, amoebic colitis, produces symptoms similar to those of ulcerative colitis. Robinson Medium for Entamoeba is prepared as per the formulation of Robinson.

Robinson has described a very sensitive method for culturing E. histolytica which includes growth of Escherichia coli on a defined medium and subsequent inoculation of these bacteria on saline agar slopes previously inoculated with faeces sample; various nutrients required for amoebic growth are also added.

COMPOSITION

Ingredients	Gms / Ltr				
Part I					
Citric acid	20.000				
Ammonium sulphate	10.000				
Magnesium sulphate	0.500				
Monopotassium phosphate	5.000				
Sodium chloride	50.000				
Bromothymol blue	0.001				
Part II					
Lactic acid	40.000 ml				

PRINCIPLE

The medium consists of Citric acid and lactic acid which provide carbon source and ammonium sulphate provides nitrogen source necessary for the growth of bacteria. Sodium chloride maintains the osmotic balance. Phosphate buffers the medium well. Bromothymol blue acts as a pH indicator.

INSTRUCTION FOR USE

- Dissolve 85.5 grams of Part I in 1000 ml distilled water containing 40 ml of Part II (Lactic Acid). This solution can be kept without sterilization for 4 weeks.
- For use, dilute the medium 10 times by adding 900 ml distilled water to 100 ml medium.
- Adjust pH to 7.0 ± 0.2 with 10N sodium hydroxide and sterilize by autoclaving at 15 psi pressure (121°C) for 15
- Cool to room temperature and inoculate Escherichia coli Strain B.

QUALITY CONTROL SPECIFICATIONS















Appearance of Powder : Part I: Off-white to yellow homogeneous free flowing powder

Part II: Colourless liquid.

Appearance of prepared medium: Colourless clear solution without any precipitate.

pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Escherichia coli strain B	23226	50-100	Good	35-37°C	24-48 Hours

PACKAGING:

In pack size of 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.

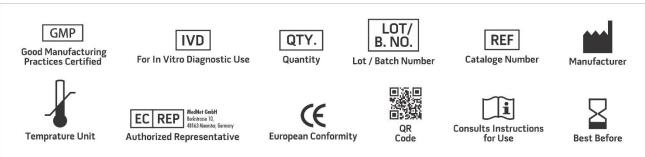
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Bruckner D. A., 1992, Clin. Microbiol. Rev. 5: 356-369.
- 2. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and YolkenR. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
- 3. Robinson G. L., 1968, Transactions of the Royal Society of Tropical Medicine and Hygiene 62:285-294.
- 4. Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.), 1996, Mackie and McCartney, Practical Medical Microbiology, 14th Edition, Churchill Livingstone.



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

*For Lab Use Only

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