TM 2239 - MANNITOL AGAR W/ PRILION

INTENDED USE
Selective agar medium for isolation and differentiation of *Salmonella* from *Proteus* species

PRODUCT SUMMARY AND EXPLANATION
Mannitol Agar w/ Prilion is a selective medium developed by Pietzsch for the isolation and differentiation of *Salmonella* from *Proteus* species. This medium helps to distinguish between lactose-negative, mannitol-positive *Salmonella* colonies from lactose-negative, mannitol-negative *Proteus* colonies by their different colouration. But as both *Salmonella* and coliform bacteria ferment mannitol, they cannot be differentiated from one another on this medium. The prepared culture medium is green; in the acidic pH range it becomes blue-green to blue. At alkaline pH; however, the yellow colour of the metachrome yellow becomes increasingly apparent.

COMPOSITION

Ingredients	Gms / Ltr
Meat peptone	10.000
Meat extract	7.000
Sodium chloride	3.000
Disodium hydrogen phosphate	2.000
D-Mannitol	15.000
Water blue	0.625
Metachrome yellow	1.875
Pril	2.000
Agar	13.000

PRINCIPLE
This medium is the modification of Gassner Agar, with lactose being replaced with mannitol and the addition of the selective component Pril. The detergent Pril inhibits flagellate movement and thus prevents swarming of *Proteus*, without affecting the growth of Salmonella.

INSTRUCTION FOR USE
- Dissolve 54.5 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Light yellow to blue homogeneous free flowing powder.
Appearance of prepared medium : Olive green coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.2±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

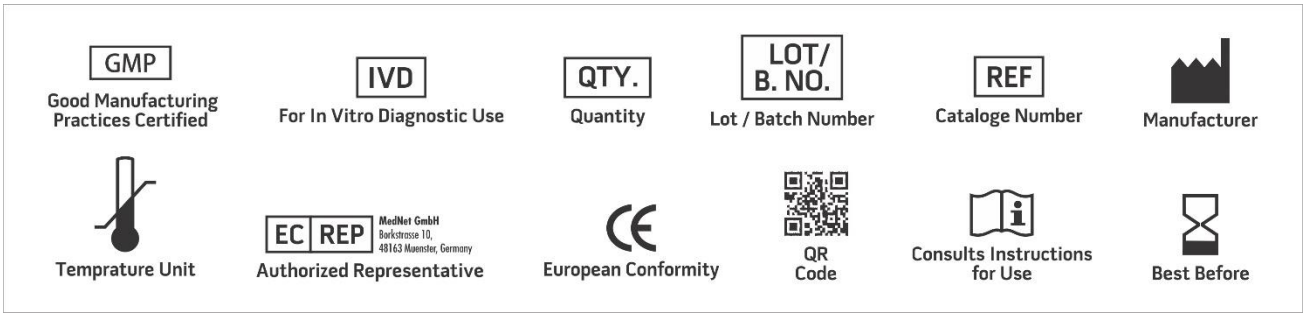
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good	40-50%	Blue	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Good	40-50%	Blue	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Good	40-50%	Blue	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Good	40-50%	Blue	35-37°C	18-24 Hours
Proteus mirabilis	14273	50-100	Fair	20 -30 %	Yellow	35-37°C	18-24 Hours
Proteus vulgaris	13315	50-100	Fair to good	20 -40 %	Yellow	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. Pietzsch O,1967, Fleischwirtsch., 1:31-32
2. Gassner G., 1918, Centralbl. F., Backt. I. Orig., 80: 219 3. Doll W., 1956, Zbl. Bakt., I. Abt. Orig., 166; 43-47
3. Doll W, 1958, Zbl. Bakt., I. Abt. Orig., 171;151-152.



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

***For Lab Use Only**

Revision: 29 Sep., 2023