TM 2125 – CHROMOGENIC RAJHANS MEDIUM (SALMONELLA AGAR)

INTENDED USE

For identification and differentiation of *Salmonella* species from among the members of *Enterobacteriaceae,* especially *Proteus* species.

PRODUCT SUMMARY AND EXPLANATION

Chromogenic Salmonella Agar is a modification of the original formulation of Rambach, used for differentiation of *Salmonella* species from *Proteus* species and other enteric bacteria. The original formulation is based on the novel characteristic of *Salmonella* species to produce acid from propylene glycol, which is detected by indicators present in the medium. These media are unique, because it is not based on acid production by propylene glycol. These media like many other media such as SS Agar, XLD Agar, recommended for the identification and differentiation of *Salmonella* species are based on lactose fermentation.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	8.000
Peptone	4.000
Yeast extract	5.000
Agar	13.500
Lactose	3.000
Chromogenic mixture	7.300
Sodium deoxycholate	1.000
Neutral red	0.020
Sodium chloride	5.000

PRINCIPLE

Casein enzymic hydrolysate, peptone and yeast extract supports the luxuriant growth of bacteria by providing carbonaceous, nitrogenous, vitamin B complex and other essential nutrients. Sodium deoxycholate inhibits gram-positive organisms rendering the medium selective for enteric microorganisms. The chromogenic mixture incorporated in the medium yields pink to red colonies of *Salmonella.* Lactose fermenting organisms form light purple to blue violet colonies. Other enteric gram-negative bacteria form Colourless colonies.

INSTRUCTION FOR USE

- Dissolve 46.82 grams in 1000 ml distilled water.
- Mix well and heat to boiling to dissolve the medium completely. Do not autoclave.
- Cool to 45-50°C. Mix well before pouring in to sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to beige homogeneous free flowing powder

Appearance of prepared medium : Light orange coloured, clear to slightly opalescent gel forms in Petri plates

pH (at 25°C) : 7.3 ± 0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the medium	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	luxuriant	>=50%	Light purple	35-37°C	24-48 Hours
Proteus mirabilis	25933	50-100	luxuriant	>=50%	Colorless	35-37°C	24-48 Hours
Klebsiella pneumoniae	13883	50-100	luxuriant	>=50%	Blue violet	35-37°C	24-48 Hours
Salmonella Typhimurium	14028	50-100	luxuriant	>=50%	Pink red	35-37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	Inhibited	0%	-	35-37°C	24-48 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 2-8°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.

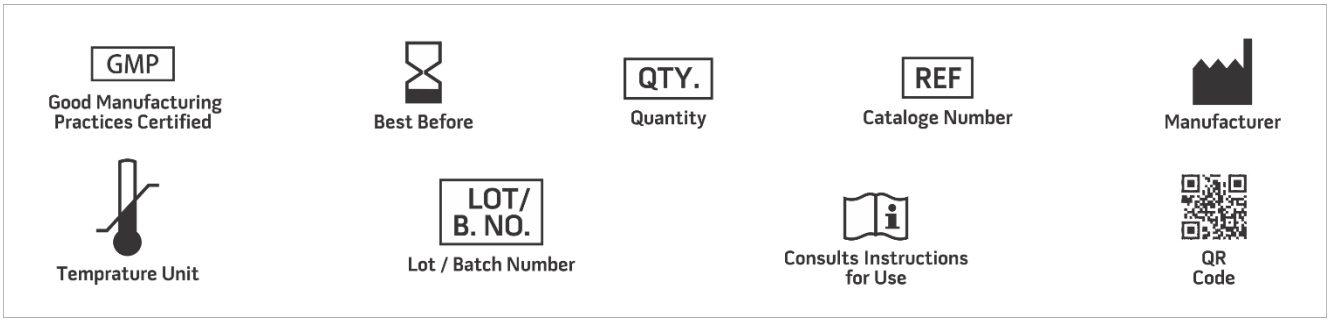
DISPOSAL

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

REFERENCES

1.Rambach A., 1990, Environment. Microbiol, 56:301

2. Greenberg A.E., Trussel R.R., Clesceri L.S., (Eds.), (1985), Standard Methods for the Examination of water and waste water, 16th ed., APHA, Washington, D.C.



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

***For Lab Use Only**

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