TM 1824- CHROMOGENIC SALMONELLA AGAR, MODIFIED

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, Modified is 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. This media is unique because it is not based on acid production by propylene glycol. This 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
Agar	12.000
Casein enzymic hydrolysate	8.000
Yeast extract	5.000
Sodium chloride	5.000
Chromogenic mixture	4.320
Peptic digest of animal tissue	4.000
Lactose	3.000
Sodium deoxycholate	1.000
Neutral red	0.020

PRINCIPLE

Casein enzymic hydrolysate, peptic digest of animal tissue and yeast extract supports the luxuriant growth of bacteria by providing carbonaceous, nitrogenous, vitamin B complex and other essential nutrients. Lactose acts as a carbon and energy source. 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. E.coli* and *K.pneumoniae* exhibits a characteristics light blue to purple colour, due to presence of the enzyme specific for chromogenic substrate. Other enteric gram-negative bacteria form colourless colonies.

INSTRUCTION FOR USE

- Dissolve 42.34 grams in 1000 ml distilled water.
- Gently heat to boiling with swirling 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 yellow coloured, clear to slightly opalescent gel
pH (at 25°C)	:	7.3±0.2

INTERPRETATION

Cultural characteristics observed after an incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

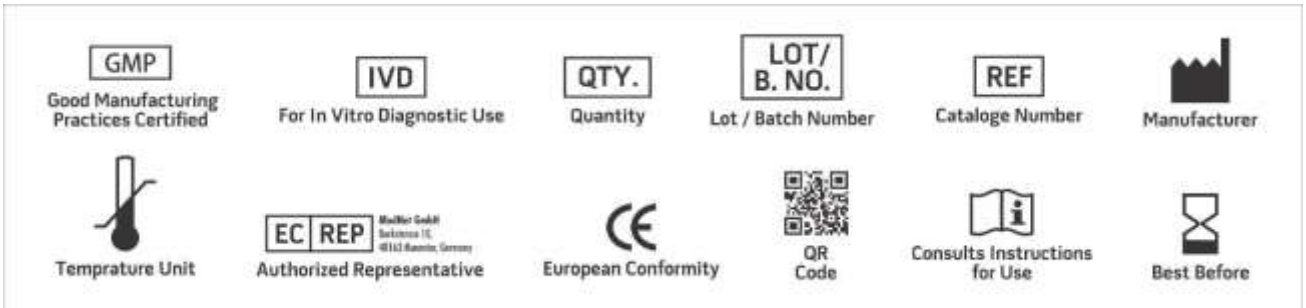
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Incubation Temp.	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	Light purple	>=50%	35 ± 2°C	24-48 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	Blue-violet	>=50%	35 ± 2°C	24-48 Hours
Proteus mirabilis	25933	50-100	Luxuriant	Colourless	>=50%	35 ± 2°C	24-48 Hours
Salmonella typhimurium	14028	50-100	Luxuriant	Pink-red	>=50%	35 ± 2°C	24-48 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	Pink-red	>=50%	35 ± 2°C	24-48 Hours
Salmonella typhi	6539	50-100	Luxuriant	Colourless	>=50%	35 ± 2°C	24-48 Hours
Shigella flexneri	12022	50-100	Luxuriant	Colourless	>=50%	35 ± 2°C	24-48 Hours
Staphylococcus aureus	25923	≥ 1000	Inhibited	-	0%	35 ± 2°C	24-48 Hours

PACKAGING:
In pack size of 100gm & 500gm 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 powder 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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