CM 20464 - CHROMOGENIC SALMONELLA AGAR

INTENDED USE

For isolation and differentiation of Salmonellaspecies from coliforms.

PRODUCT SUMMARY AND EXPLANATION

ChromogenicSalmonella Agar is used forisolation and differentiation of Salmonella sp. from other enteric bacteria. This media is a modification of the original formulation of Rambach formulation differentiates Salmonella based on propylene glycol utilization and presence of chromogenic indicator. However, Chromogenic Salmonella Agar uses only a chromogenic mixture for identification and differentiation of Salmonella species.

COMPOSITION

Ingredients	Gms / Ltr
Agar	13.000
Peptic digest of animal tissue	6.000
Chromogenic mixture	5.400
Yeast extract	2.500
Bile salts mixture	1.000

PRINCIPLE

Peptone and yeast extractprovides nitrogenous, carbonaceous compounds and other essential growth nutrients. Escherichia coli and Salmonellaareeasily distinguishable due to their colony characteristics. Salmonella forms light purple coloured colonies with a purplehalo. E.coli and other ß-glucuronidase positive organism exhibits a characteristic blue colour, due to presence of theenzyme ßglucuronidase. Other organisms form colourless colonies. The characteristic light purple and blue colour isdueto the chromogenic mixture.Bile salts mixture inhibits gram-positive organisms. Conventional method employeesthe H_2S production property for Salmonella detection which is also exhibited by other non-Salmonella species suchasCitrobacter, Proteus, etc. Hence further biochemical confirmation is required for further identification. Salmonellaspeciesisolated from food or clinical samples exhibit light purple colour with halo due to the specific enzyme substratereaction

INSTRUCTION FORUSE

Suspend 27.90 gramsin1000ml distilled water.
Gently heat to boilingwithswirling to dissolve the medium completely. Do not autoclave.
Cool to 45-50°C.
Mix well and pour intosterilePetri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	:	Cream to yellow colour, free flowing powder
Appearance of prepared medium	:	Light amber colour,slightly opalescent gel
pH (at 25°C)	:	7.7± 0.2

INTERPRETATION

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

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temp.	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=50%	Blue	35±2°C	24-48 Hours

Salmonella typhi	6539	50-100	Good-Luxuriant	>=50%	Light purple w/halo	35±2°C	24-48 Hours
Salmonella typhimurium	14028	50-100	Luxuriant	>=50%	Light purple w/halo	35±2°C	24-48 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	>=50%	Light purple w/halo	35±2°C	24-48 Hours
Proteus vulgaris	13315	50 - 100	Good	40-50%	Colourless	35±2°C	24-48 Hours
Bacillus subtilis	6633	≥1000	Inhibited	0%	-	35±2°C	24-48 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	0%	-	35±2°C	24-48 Hours

PACKAGING:

Inpacksizeof100gm & 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.

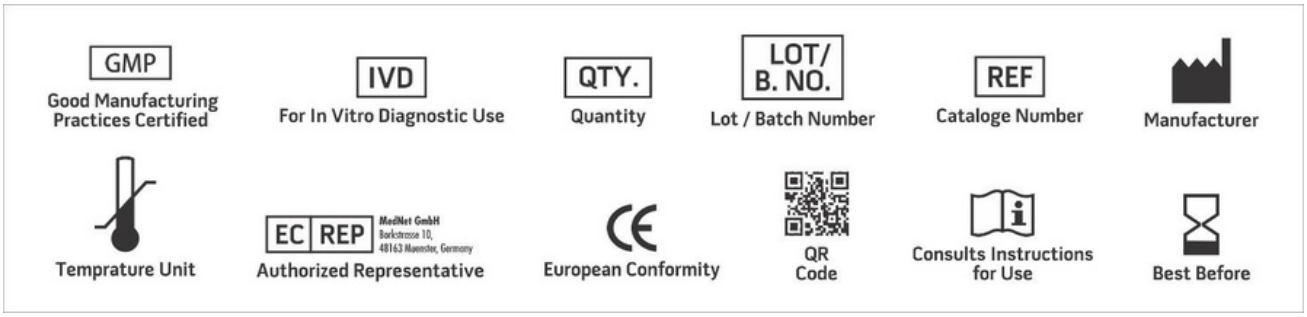
Product Deterioration: Do not use if powder show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Murray,P.R., Baron, E.J., Pfaller, M.A., Jorgensen, J.H., Yolken, R.H. (Eds.). 2003. Manual of clinical microbiology, 8th ed. American Society for Microbiology, Washington,D.C.
2. Rambach, A. 1990. Appl. Environ. Microbiol. 56:301-303.
3. Gruenewald, R., Henderson, R.W., Yappow, S. 1991. J. Clin. Microbiol. 29:2354-2356.



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

*ForLab Use Only