CM 20465 - CHROMOGENIC SALMONELLA AGAR

INTENDED USE

For identification of Salmonella species from other organisms in the family Enterobacteriaceae.

PRODUCT SUMMARY AND EXPLANATION

Salmonella is ubiquitousinanimal populationsand is generally isolated from the intestinal tract of animals and humans. It is one of the most prevalent organisms associated with foodborne illnesses, which is often linked to animal origin. Salmonella typhi and Salmonella paratyphi A& B cause gastroenteritis, bacteremia and enteric fever, Salmonella choleraesuis causes gastroenteritis and enteric fever, especially in children. Salmonella typhimurium is the most frequently isolated serotype of Salmonella. Salmonella is a cause of food poisoning.
Salmonella Chromogenic Medium is designed to identify Salmonella species based on their utilization of one chromogenic substrate. Their inability to utilize another chromogenic substrate, that most other members of the family Enterobacteriaceae can utilize, enables rapid and reliable identification of Salmonella species.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Heart infusion powder	12.000
Chromogenic Mixture	8.000
Yeast hydrolysate	5.000
Sodium taurocholate	5.000
Tryptose	5.000
Sodium cholate	3.000
Sodium deoxycholate	1.000

PRINCIPLE

Sodium cholate, Sodiumtaurocholate and Sodium deoxycholate in the medium helps to restrict the growth of other organisms besides theselectivesupplement added to the medium that inhibits competing microorganisms. Heart Infusion powder, yeasthydrolysate and tryptose in the medium provides nitrogenous, carbonaceous compounds and other essential growthnutrients. Chromogenic Salmonella Agar uses chromogenic mixture for identification and differentiation of Salmonellaspecies. Due to the presence of chromogenic mix in the medium Salmonella are easily distinguishable and formspurple coloured colonies while some Enterobacteriaceae like Klebsiella and Enterobacter forms blue to dark blue colouredcolonies.

INSTRUCTIONFOR USE

Dissolve 54 gramsin1000 ml distilled water.
Gently heat withswirling to dissolve the medium completely. Do not autoclave.
Cool to 45-50°C.
Add the contentsofone vial of Salmonella Selective Supplement (TS 252)
Mix well and pourintosterile Petri dishes.

Note: Do not hold at boilingtemperature.

QUALITY CONTROL SPECIFICATIONS

Appearance of powder : Light yellow to beige colour, homogeneous free flowing powder

Appearance of prepared medium : Whitish cream colour, opaque gel
pH (at 25°C) : 7.3± 0.2

INTERPRETATION

Culturalcharacteristics observed after incubation with addition of Salmonella Selective Supplement (TS 252). Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Incubation Temp.	Incubation Period
Salmonella enteritidis	13076	50-100	Good-Luxuriant	Purple	>=50%	35± 2°C	18-24 Hours
Salmonella typhi	19430	50-100	Good-Luxuriant	Purple	>=50%	35± 2°C	18-24 Hours
Salmonella typhimurium	14028	50-100	Good-Luxuriant	Purple	>=50%	35± 2°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Good	Blue	40-50%	35± 2°C	18-24 Hours
Enterococcus faecalis	29212	≥ 1000	Inhibited	---	0%	35± 2°C	18-24 Hours
Staphylococcus aureus	25923	≥ 1000	Inhibited	---	0%	35± 2°C	18-24 Hours

PACKAGING

Inpacksizeof100gm & 500gm bottles.

STORAGE

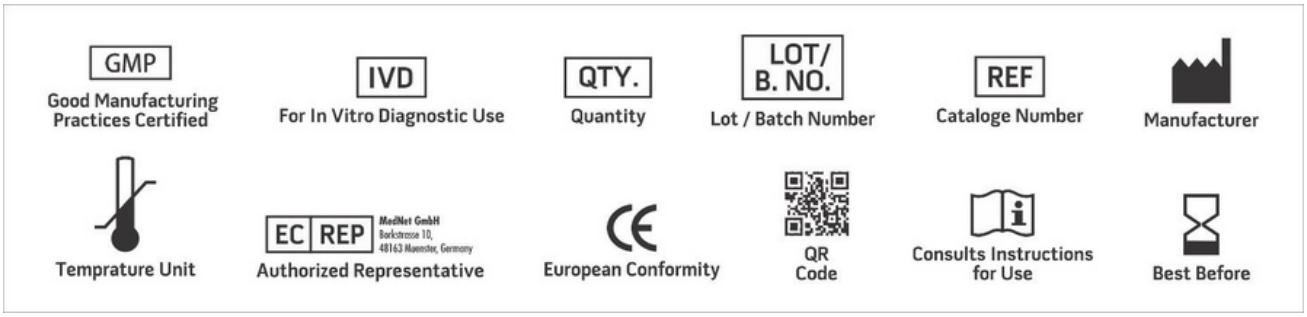
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. D'Aoust, Mauer and Bailey. 2001. Salmonella species. In: Doyle, Beuchat and Montville (ed.), Food microbiology: fundamentals and frontiers, 2 nd ed. American Society for Microbiology, Washington, D.C.
2. Gaillot, O. et al. (1999) J. Clin. Microbiol. 37: 762-765.
3. Rambach, A. (1990) Appl. Environ. Microbiol. 56: 301-303.
4. Gruenewald, R. (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