05538 Salmonella *ChromoSelect* Agar, Improved

A selective chromogenic medium used for simultaneous detection of *Salmonella* and *Escherichia coli* from food and water samples.

Composition:

Ingredients	Grams/Litre
Peptone special	8.0
Yeast extract	2.0
Sodium deoxycholate	1.0
Chromogenic mixture	3.25
Agar	12.0
Final pH 7.3 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-8°C.

Appearance: Pinkish yellow colored, homogeneous, free flowing powder.
Colour and Clarity: Reddish pink colored, slightly opalescent gel forms in petri plates.

Directions:
Suspend 26.25 g in 1 litre distilled water. Boil gently to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 50°C. Mix well and pour into sterile plates.

Principle and Interpretation:
Salmonella *ChromoSelect* media are modification of the original formulation of Rambach(1) used for the differentiation of *Salmonella* species from other enteric bacteria. The Rambach formulation differentiate *Salmonella* based on propylene glycol utilization and presence of chromogenic indicator. But Salmonella *ChromoSelect* Agar uses only a chromogenic mixture for identification and differentiation of *Salmonella* species.
Peptone special and Yeast extract provides nitrogenous, carbonaceous compounds, vitamines and other essential growth nutrients. Deoxycholate inhibits most gram positive organisms.
E. coli and *Sallmonella* are easily distinguishable due to the colony characteristics. *Salmonella* give pink red colonies. *E. coli* has a characteristic blue colour, due to the presence by enzyme β-glucuronidase. Other organisms give colourless colonies. The characteristic light purple colour is due to the chromogenic mixture.

Cultural characteristics after 24-48 hours at 35-37°C.

Organisms (ATCC)	Growth	Colour of colony
Escherichia coli (25922)	luxuriant	green to blue
Salmonella enteritidis (13076)	luxuriant	pink to red
Salmonella typhi (6539)	good- luxuriant	light pink
Sallmonella typhimurium (14028)	luxuriant	pink to red
Proteus vulgaris (13315)	good	light brown
Staphylococcus aureus (25923)	inhibited	-
Bacillus subtilis (6633)	inhibited	-

References:
1. A. Rambach, Environ. Microbiol., 56, 301 (1990) A Rambach, New plate medium for facilitated differentiation of *Salmonella* spp. from *Proteus* spp. and other enteric bacteria., Appl. Environ. Microbiol. 56, 301-303 (1990)
2. R. Greenwald, R.W. Henderson, S. Yappan, Use of Rambach Propylene Glycol Containing Agar for identification of *Salmonella* spp., J. Clin. Microbiol., 29, 2354 (1991)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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