

78419 Salmonella ChromoSelect Agar

A selective chromgenic medium used for the isolation and differentiation of *Salmonella* species from coliforms in food and water.

Composition:

Ingredients	Grams/Litre	
Peptic digest of animal tissue	6.0	
Yeast extract	2.5	
Bile salt mixture	1.0	
Chromogenic mixture	5.4	
Agar	13.0	
Final pH (at 25 °C) 7.7 \pm 0.2		

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Yellow to beige coloured, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Yellow to brownish-yellow coloured, clear gel forms in petri plates.

Directions:

Suspend 27.9g 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 petri plates.

Principle and Interpretation:

Salmonella *ChromoSelect* Agar is a modification of the original formulation of Rambach [2] used for differentiation of *Salmonella* species from other enteric bacteria. Rambach formulation differentiates Salmonella on the basis of propylene glycol utilization which is rendered visible due to a chromogenic indicator incorporated in the media, but Salmonella *ChromoSelect* Agar uses only a chromogenic mixture to differentiates the same.

Peptic digest of animal tissue provides nitrogenous, carbonaceous compounds and other essential growth nutrients. *E. coli* and *Sallmonella* are easily distinguishable due to the colony characteristics. *Salmonella* give light purple colonies with halo. *E. coli* has a characteristic blue colour (presence of enzyme \Box -glucuronidase), other organisms give colourless colonies. The characteristic light purple and blue colour is due to the chromogenic mixture [2]. The bile salts mixture inhibits gram positive organisms.

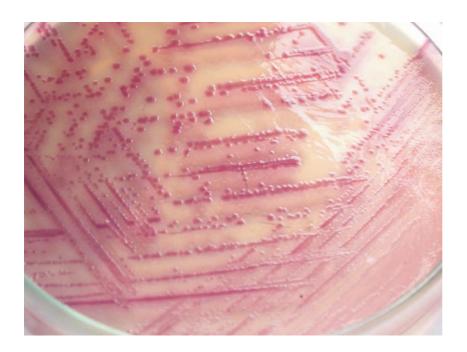
Cultural characteristics after 24-48 hours at 37°C

Organisms (ATCC)	Growth	Colour of colony
Escherichia coli (25922)	luxuriant	blue
Salmonella enteritidis (13076)	luxuriant	light purple with halo
Salmonella typhi (6539)	good- luxuriant	light purple with halo
Sallmonella typhimurium (14028)	luxuriant	light purple with halo
Proteus vulgaris (13315)	good	colourless
Staphylococcus aureus (25923)	inhibited	-
Bacillus subtilis (6633)	inhibited	-



References:

- 1. Rambach A., (1990), Environ. Microbiol., 56:301.
- 2. Greenwald R., Henderson R.W. and Yappan S., (1991), J. Clin. Microbiol., 29:2354.



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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