

For the isolation of Salmonella spp. in clinical samples and foods.

Formula in g/L			
Casein peptone	5,00	Beef extract	5,00
Sodium citrate	8,50	Chromogenic mixture ..	5,81
Agar	12,80		

Final pH at 25°C: 7,2 ± 0,2

Principle:

Salmonella Chromogenic LAB-AGAR™ is a selective chromogenic medium used for the detection and presumptive identification of Salmonella species from clinical samples, foods and water. The media traditionally used to differentiate species of Salmonella from the rest Enterobacteriaceae family, based on their capacity to produce hydrogen sulfide and their inability to ferment lactose, are not really adequate as there are more than 2000 species of Salmonella which do not have these characteristics.

Casein peptone and beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Chromogenic mixture, in conjunction with sodium citrate, aids in inhibiting Gram-positive organisms, Proteus and coliforms.

To identify Salmonella species, this chromogenic agent based on the combination of two chromogenic substrates: that ease quick identification, These two chromogenes are X-gal and Magenta-caprylate. X-gal is a substrate incorporated to visualize the enzyme β-D-galactosidase-producing organisms as blue-green colonies. Magenta colonies are a result of the inability to utilize another chromogenic substrate. Thus, non-Salmonella bacteria appear blue-green or are not stained by any of the chromogenes of the medium.

Preparation: suspend 37,1 grams of the medium in one liter of distilled water. Mix well and heat with frequent agitation until the medium boils well. Boil for few seconds. DO NOT OVERHEAT!. DO NOT AUTOCLAVE!. Cool to 45-50°C, mix well and pour into Petri dishes.

The prepared medium should be stored at 8-15°C.

Procedure:

- ★ Inoculate with the sample
- ★ Incubate 37°C ± 1°C for 18 - 24 hours

Colony color:

- ★ Magenta - Salmonella spp.
- ★ Blue-green - Escherichia coli, Citrobacter spp.
- ★ Pale brown - Proteus spp.
- ★ Light pink- Pseudomonas aeruginosa

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 8°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37±1°C and observed after 18-24 hours

Microorganisms	Growth	Colony color
Escherichia coli ATCC 25922	Partially inhibited	Blue-green
Salmonella Enteritidis ATCC 13076	Good	Magenta
Salmonella Typhi ATCC 19430	Good	Magenta
Salmonella Lactose (+)	Good	Magenta
Proteus vulgaris ATCC 13315	Inhibited	Pal brown

Packaging: 500 g