

For detection and isolation of Salmonella





Rambach™ Agar

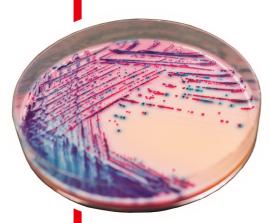


Plate Reading

- Salmonella
- → red
- Many Coliforms
- → blue, violet
- Proteus, etc.
- → colourless



Quality Control Strains

S. enteritidis ATCC® 13076 red
S. abaetuba ATCC® 35640 red
E. coli ATCC® 25922 blue, small
C. freundii ATCC® 8090 purple blue
S. aureus ATCC® 25923 inhibited

For detection and isolation of Salmonella species in food samples

Background

Despite its early discovery in the 1880's, Salmonella remains a major worldwide pathogen and one of the most common causes of food-borne infections. For instance, in the US, Salmonella has an incidence rate of 16.2 cases per 100,000 (CDC estimation, 2008).

Mainly due to contamination in the food chain and/or during food-production processes, Salmonella commonly induces enteric illness whose major symptoms are abdominal cramps, diarrhea, nausea, vomiting. More severe cases, for instance typhoid cases or infections in immuno-depressed patients, can lead to body dehydration with renal failure or bacteraemia. This underlines the importance of a continuous control of Salmonella along the entire food production chain. Large scale testing is only possible with efficient detection tools.

Medium Performance

RELIABLE

The first commercially available (1989) chromogenic medium for Salmonella, is still successful today, thanks to its performance. It can be also used with clinical specimens.

HIGH SPECIFICITY / LESS WORKLOAD

The conventional media for the detection of Salmonella by H2S character has very poor specificity, creating an abundance of false positives (Citrobacter, Proteus, etc.) among the rare real positive Salmonella. The workload for unnecessary examination of suspect colonies is so high that the real positive Salmonella colonies might often be missed in routine testing. Because of their poor specificity, conventional media require tedious examination of at least 10 colonies per suspected sample. On the contrary, Rambach™ Agar eliminates most of those false positives and allows technicians to focus on the real contaminated samples.

VERY HIGH SENSITIVITY

Salmonella → 93,9%*

*Sensitivity from scientific study: Gruenewald, R. et al. 1991. Use of Rambach Propylene Glycol Containing Agar for Identification of Salmonella spp. J.C.M. 29: 2354-2356.

INTENSE RED COLOURATION

for easy reading, compared to other chromogenic media.

FAST RESULTS

particularly useful in case of a sudden, dangerous outbreak of Salmonella food poisoning.

Medium Description

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Powder Base	Total 30.7 g/L Opaque agar 20.0 Peptone & Yeast extract 8.0 Chromogenic and selective mix 2.7 Storage at $15/30^{\circ}\text{C}$ - pH: 7.1 ± 0.2 Shelf Life 3 years
Supplement (Included)	Propylene glycol (Liquid form)
Usual Samples	Industrial: Food and Environmental samples Clinical: stool or blood samples isolation, etc.
Procedure	Direct streaking or after an appropriate enrichment step of the sample. Incubation at 37°C for 24h. Aerobic condition.

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