

## SALMONELLA DETECTION MEDIUM

### DESCRIPTION

SALMONELLA DETECTION MEDIUM represents an alternative method for the detection of Salmonella in human and animal products, as well as environmental samples (with the exception of those from animal production).

This method is destined to the detection of motile Salmonella, and is not adapted to non-motile Salmonella (non-motile strains or that have lost their mobility).

The analyses can be declared negative in 37 hours after only two steps of pre-enrichment (Salmonella Enrichment Broth) and differentiation (Salmonella Detection Medium).

COMPOSITION	g/L
Peptone	4.59
Tryptone	4.59
Sodium chloride	7.34
Potassium dihydrogen phosphate	1.47
Selective Mix	10.98
Bacteriological agar	2.70

**Final pH 5,2 ± 0,2 at 25°C**

### WARNING AND PRECAUTIONS

#### For in vitro diagnostic use.

Observe the precautions normally taken when handling laboratory reagents.

**Prepared Medium:** The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.

**Safety Data Sheet** is available on request for professional users.

All waste must be disposed of according to local directives.

### STORAGE AND STABILITY

**Prepared medium:** 10-25°C

The product is stable until the expiration date indicated on the label under the recommended storage conditions.

### PREPARATION

Melt the content of the bottle/tubes in a water bath at 100°C until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle/tube upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

### PROCEDURE

- Introduce aseptically 25 g of the sample to be tested into 225 mL of Salmonella Enrichment Broth.
- Homogenize or use a stomacher if needed.
- Incubate the broth at 37.0 ± 1.0 °C for 16 to 22 hours.
- Inoculate 3 drops (roughly 0.1 mL) of the culture coming from the Salmonella Enrichment, in the center of a plate of Salmonella Detection Medium.
- Incubate at 41.5 ± 1.0 °C, for 24 ± 3 hours, without inverting the plates.

### RESULTS

The appearance of a white, opaque halo with a diameter equal or superior to 30 mm, at the inoculation point indicates the presumptive presence of Salmonella.

### QUALITY CONTROL

**Prepared medium:** semisolid blue agar.

**Typical culture response after 18 h of incubation at 37 °C in Salmonella Enrichment Broth, followed by 24 h of incubation at 41.5 °C on Salmonella Detection Medium:**

### MICROORGANISM

Salmonella Typhimurium ATCC® 14028

Grey-white, turbid zone extending out from inoculated drop(s). After 24-48 h, the turbid zone(s) will be (almost) fully migrated over the plate.

Salmonella Enteritidis ATCC 13076

Grey-white, turbid zone extending out from inoculated drop(s). After 24-48 h, the turbid zone(s) will be (almost) fully migrated over the plate.

Escherichia coli ATCC 25922

Possible growth at the place of the inoculated drop(s) without a turbid zone.

### REFERENCES

- PERRY, D.F., and QUIRING, C.. 1997. Fundamental aspects of enzyme/chromogenic substrate interactions in agar media formulations for esterase and glycosidase detection in Salmonella. In Salmonella and Salmonellosis Proceedings. Ploufragan-France, 63-70.
- HUMBERT, F., LALANDE, F., ROSE, V., et SALVAT, G.. 1998. Evaluation d'un nouveau milieu d'isolement pour la mise en évidence des salmonelles dans les élevages et les denrées d'origine animale. 5ème congrès de la Société Française de Microbiologie. 128.
- NF EN ISO 6579. Décembre 2002. Microbiologie des aliments – Méthode horizontale pour la Recherche des Salmonella spp. Modifiée en Octobre 2007 par l'amendement A1 : annexe D : recherche de Salmonella spp. dans les matières fécales des animaux et dans des échantillons environnementaux au stade de la production primaire.
- NF EN ISO 16140. Octobre 2003. Microbiologie des aliments. Protocole pour la validation des méthodes alternatives. Modifiée en Octobre 2011 par l'amendement A1.
- NF EN ISO 7218. Octobre 2007. Microbiologie des Aliments. Exigences générales et recommandations. Modifiée en Décembre 2013 par l'amendement A1.
- NF EN ISO 16140-2:2016 - Microbiology of the food chain — Method validation — Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method

### PRESENTATION

**Packaging**

**REF.**

**Prepared medium:**

**SALMONELLA DETECTION MEDIUM**

10 x 200 mL bottles

70052

### SYMBOLS

- Read the instructions**
- Biological hazard**
- CE Mark (product complies with the requirements of Regulation (EU) 746/2017)**
- Temperature limitation**
- Use by**
- For in vitro diagnostic use**
- Manufacturer**