

**Product :
PURPLE RHAMNOSE FERMENTATION
AGAR**
Specification

Medio de cultivo sólido para verificar la utilización de la ramnosa en microorganismos muy exigentes.

Formula * in g/L

Enzymatic digest of animal tissues.....	10.00
Meat extract.....	1.00
Sodium chloride.....	5.00
L-Rhamnose.....	5.00
Bromocresol purple.....	0.02
Agar.....	13.00

Final pH 6,8 ±0,2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Suspend 34 g of powder in 1 L of distilled water. Bring to the boil. Cool to 45°C and distribute into suitable containers and sterilize by autoclaving at 121°C for 15 minutes.

Description

This medium is the solid version of the sugar fermentation broth prescribed by the BAM (Media M130) and the ISO 11290. This modification facilitates the observation of rhamnose fermentation activity by the halo size (the bigger, the halo the more activity) and by the colour intensity (the more yellow, the greater the production of acid from the rhamnose).

Technique

Plates are inoculated with colonies from pure cultures grown on a confirmative medium. The inoculation must be carried out so as to allow good growth of colonies. Incubate at 37±1 °C for 24-48h. Positive reactions (formation of acid from rhamnose) are manifested by the appearance of a halo turning purple to yellow, and this occurs mostly at 24 hours of incubation. The halo size and intensity of the yellow color is proportional to the amount of acid produced.

Quality control

Incubation temperature: 37±1 °C

Incubation time: 24-48 h

Inoculum: Pure culture.

Microorganism
Growth
Remarks

Listeria monocytogenes ATCC® 19115
Listeria monocytogenes ATCC® 13932
Listeria ivanovii ATCC® 19119

Good
 Good
 Good

Rhamnose (+). Medium Yellow
 Rhamnose (+). Medium Yellow
 Rhamnose (-). Medium no change

References

- ATLAS, R.M. and L. C. PARKS (1993) Handbook of Microbiological Media. CRC Press Inc. Boca Ratón Fla. USA
- F.D.A. (1988) Bacteriological Analytical Manual. 8th Edition. Revision A. AOAC International. Gaithersburg. MD. USA
- HITCHINS, A.D. and K. JINNERMAN (2013) Detection and enumeration of *Listeria monocytogenes* in foods. In FDA BAM, Chapter 10.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 11290-1 Standard (2017) Microbiology of the food chain -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. -- Part 1: Detection method.
- ISO 11290-2 Standard (2017) Microbiology of the food chain -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. -- Part 2: Enumeration method.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).