

Specification

Culture medium for the cultivation of *Mycobacterium* species.

Presentation

20 Tubes
 Tube 16 x 113 mm
 with: 6,5 ± 0,2 ml

Packaging Details

16 x113 mm glass tubes, ink labelled, Metallic-Non
 injectable cap. - 20 tubes per box .

Shelf Life

12 months

Storage

8-25°C

Composition

Composition (g/l):

Magnesium sulfate.....	0.146
Magnesium citrate.....	0.365
L Asparagine.....	2.195
Monopotassium phosphate.....	1.463
Sodium pyruvate.....	1.000
Glutamic acid	0.670
Potato starch.....	12.19
Glycerol	7.310
Blue litmus.....	0.244
Malachite Green.....	0.195
Gelatin.....	5.585
Eggs □ (whole).....	487ml
Egg yolks.....	243ml
Anthracite □ ash.....	0.160
Trace □element solution.....	1ml
Water.....	269ml

Description /Technique

Description

Coletsos Medium is recommended for primary isolation of mycobacteria, since lacking glycerin and including pyruvate allows the growth of the bovine tuberculous bacillus. Early-onset colonies are more abundant and larger than in other egg media, but are almost always smooth (S = smooth). The medium of Coletsos is not suitable for conducting sensitivity tests as it inactivates some antibiotics and tuberculostatics. Lowenstein-Jenssen's medium is recommended for this type of assays, as well as for maintenance and conservation of mycobacterial strains.

Technique

Aseptically inoculate the tubes and incubate in aerobiosis at 35°C +/- 2°C, keep the tube tilted, but not hermetically closed for 24 hours until the liquid is absorbed by the medium; Then seal the stopper and continue the incubation for a maximum of 45 days. Periodically check the tube to observe the typical growth of mycobacteria on the sloped tube surface.

The specific identification of any isolated mycobacteria must be confirmed by other morphological and biochemical tests.

Precautions:

This product is for the exclusive use of professionals.

It should not be used in case of microbial contamination, discoloration, signs of dehydration, breakage or other signs of deterioration. The clinical specimens to be processed may present other important pathogens, so before to dispose of the materials used, it is mandatory its sterilization.

It is required the use of level 2 biological safety practices and procedures, in addition to containment equipment and facilities, always avoiding the formation of aerosols during manipulations.

Storage and Useful Life:

Once received in the laboratory, store the tubes in a dark and dry place at a temperature of 8°C, in their original packaging. At the time of use, they can be kept at room temperature for short periods of time, just what is needed to temper them before inoculation.

Condensation water that may accumulate at the bottom of the tube is reabsorbed if held horizontal for a few days.

Avoid freezing and overheating. The expiration date marks the maximum date of use.

Characteristics and Limitations of Use:

This medium gives growths of six to eight days before than Löwenstein-Jensen medium, having better recovery and size colonies.

The color of the medium is green-gray, and may occasionally present whitish spots from the egg.

The action of light decolors the malachite green and renders the tubes unusable, turning the culture medium dirty yellow in color.

The incubation should be done with the tubes in a horizontal position, with the cap unstressed, making the first reading of the growth at 5 - 7 days of the inoculum.

The culture medium loses color during incubation, reaching the end of the incubation with a pale green color.

Aseptic specimens (CSF, pleural exudate, etc.) do not require prior decontamination, but in the case of sputum samples, decontamination and fluidification are required before inoculation.

Quality control

Physical/Chemical control

Color : Green

pH: 6.7 ± 0.2 at 25°C

Microbiological control

Prepare a suspension from pure culture

Loop spreading

Aerobiosis. Incubation inclined tubes for a maximum of 21 days

Microorganism	Growth
<i>Mycobacterium gordonae</i> ATCC® 14470	Good
<i>Mycobacterium kansasii</i> ATCC® 12478	Good
<i>Mycobacterium tuberculosis</i> ATCC® 25177	Good
<i>Mycobacterium fortuitum</i> ATCC® 6841	Good
<i>Mycobacterium smegmatis</i> ATCC® 14468	Good
<i>Mycobacterium terrae</i> ATCC® 15755	Good
<i>Mycobacterium intracellulare</i> ATCC® 13950	Good

Sterility Control

Incubation 7 days at 30-35°C: - NO GROWTH

Bibliography

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