

TM0262 LOWENSTEIN - JENSEN + PYRUVATE 6ML
TM1817 LOWENSTEIN - JENSEN + PYRUVATE 12ML - Tray of 75**FORMULA**

Egg Yolk Suspension	375.0	mL per litre
RNA	0.0075	gm
Sodium Pyruvate	7.5	
Asparagine	2.0	
Magnesium Sulphate	0.15	
Potassium Dihydrogen Phosphate	1.5	
Sodium Citrate	0.35	
Tryptone	4.5	
Ferric Ammonium Citrate	0.85	
Malachite Green	0.250	

DESCRIPTION

Media of the Lowenstein-Jensen (L-J) type remain amongst the most commonly used for the isolation and detection of mycobacteria (1). L-J media as described, although based on the original formulation of Lowenstein (2), incorporates a number of modifications. This medium is produced using an egg yolk base, which after inspissation results in a solid final product. All eggs are obtained and used fresh and are guaranteed to be antibiotic free. Replacing glycerol with pyruvic acid is advantageous when attempting to cultivate *M. bovis* and some dysgonic strains of *M. tuberculosis* (3). Malachite Green dye acts as both an inhibitor and a pH indicator, balanced to permit an early growth of mycobacteria while at the same time prevent growth of most contaminants that may have survived the decontamination/digestion process (4).

QUALITY CONTROL

ORGANISM: *M. tuberculosis* MVQC 0230 (ATCC™ 25177), *M. intracellulare* MVQC 0152 (ATCC™ 13950), *M. fortuitum* MVQC 0150 (ATCC™ 6841)

SAMPLE NUMBER: Sample size is determined in accordance with ASM Guidelines (5).

STERILITY: Samples are incubated at 35°C for 7 days and at 30°C for 21 days after which they are examined for sterility.

EXPECTED RESULTS:

<i>M. tuberculosis</i>	Growth
<i>M. intracellulare</i>	Growth
<i>M. fortuitum</i>	Growth

ALSO CHECK AND RECORD:

1. Batch number correct
2. Colour
3. Gel Strength
4. Sterility
5. Correctly Labelled - LJ + PYRUVATE SLOPE

STORAGE

A shelf life of 6 months applies when this product is stored at 2° - 8°C in its original packaging

REFERENCES

1. Murray P.R., et al (eds). *Manual of Clinical Microbiology*, 8th edition. 2003. ASM Press, Washington DC. p.547.
2. Lowenstein E. (1931) Zent. f. Bakt. u. Infektionskr. I. Abt. Orig. **120**: 127-129.
3. Bridson, E.Y. *The Oxoid Manual*, 9th Edition. 2006. Oxoid Limited, Basingstoke.
4. MacFaddin, J.F. *Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria*. 1985. Lippincott, Williams & Wilkins, Philadelphia
5. *Guidelines for Assuring Quality of Medical Microbiological Culture Media*. 2nd edition 2012. Culture Media Special Interest Group, Australian Society for Microbiology