

## CM 22,741 – L.J. MEDIUM SLANT

### INTENDED USE

Forcultivationof*Mycobacterium tuberculosis*.

### PRODUCTSUMMARY ANDEXPLANATION

L.J.Medium slant is usedfor isolation andcultivation of *Mycobacterium* species. It is prepared as per the Jensen's modification of the original formulation ofLowenstein. The Egg-based media contains whole egg or egg yolk, potato starch, salts and glycerol and are solidifiedbyinspissation. These substances provide fatty acids and protein required for the metabolism of *Mycobacteria*.

### COMPOSITION

Ingredients	Gms / Ltr
Potato starch	30.000
L-Asparagine	3.600
Potassium phosphate mono	2.400
Magnesium sulphate	0.240
Magnesium citrate	0.600
Malachite green	0.400
Glycerol	12.00ml/600ml
Whole egg emulsion	1000.00ml/600ml

### PRINCIPLE

The medium contains L-Asparagine and potato starch which acts as source of nitrogen and vitamins. Mono potassium phosphate and Magnesium sulphate enhances organism's growth and acts as buffers. Glycerol and egg suspension provide fatty acids and protein required for the metabolism of *Mycobacteria*. Malachite green serves as an inhibitor as well as pH indicator. Formation of blue zones indicates a decrease in pH by gram-positive contaminants (e.g. Streptococci) and yellow zones of dye destruction by gram-negative bacilli.

### INSTRUCTION FOR USE

1. Inoculate eitherthe sputum sample previously subjected to decontamination and concentration process or the pure culture of*Mycobacteria*isolated from a clinical sample on the surface of slants.
2. Incubate the slants at 35-37°Cwith 5-10% CO<sub>2</sub> and examine the slants every week up to 8 weeks.

### QUALITY CONTROL SPECIFICATIONS

**Appearance** : Pale bluish green coloured, opaque, smooth slants.  
**Sterility Check** : Passes release criteria

### INTERPRETATION

Culturalcharacteristics observed after Incubation with 5-10% CO<sub>2</sub>.

Microorganism	ATCC	Inoculum	Growth	Appearance of colony	Incubation Temperature	Incubation Period
<i>Mycobacterium avium</i>	25291	Standardized inoculum	Luxuriant	Smooth, non-pigmented colonies	35-37°C	2-4 weeks



