MM0351

Lowenstein Jensen medium

Use and description:
Selective medium for the isolation, enumeration and differentiation of Mycobacteria and for determination of the susceptibility of these bacteria to chemotherapeutic agents and to antiobiotics. It should be supplemented with glycerol as carbon source and whole eggs.

Composition per liter:
L-asparagin……..3.60 g
Potato starch……30.00 g
KH_2PO_4……..……2.40 g
$MgSO_4$……..0.24 g
Mg-citrate……..0.60 g
Malachite green……..…0.40 g

Final pH of the ready to use medium: 7.0 ± 0.3

Medium preparation:
Add 37.2 grams of dehydrated culture medium to 600 ml of distilled water and 12 ml glycerol. Swirl to mix, then bring to the boil with mixing. Autoclave at 121 °C for 15 minutes. Cooled down to 50-60 °C and aseptically add 1000 ml homogenised whole eggs. Mix gently and avoid dispensing air into the medium. Dispense into tubes and put into slanted position. Place these tubes at 85 °C for 45 minutes to enable the coagulation.

Quality specifications:
Dehydrated medium: homogeneous, green coloured, fine powder.
Ready to use medium: dark green gel, with whole egg the medium is pale green and opaque.

Microbiological response, 2-3 weeks incubation at 36±2 °C:

Organisms	Result	Inoculum CFU
Mycobacterium tuberculosis ATCC 25177	Growth	100-1000
Mycobacterium fortuitum ATCC 6841	growth	100-1000
Mycobacterium intracellulare ATCC13950	growth	100-1000
Mycobacterium kansasii ATCC 12478	Growth	100-1000
Mycobacterium scrofulaceum ATCC 19981	growth	100-1000

Storage:
Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.