

ADC Enrichment Supplement

Cat. 6038

For the isolation and cultivation of Mycobacteria.

Practical information

Applications	Categories
Selective isolation	Mycobacteria

Industry: Clinical

Principles and uses

Middlebrook Broth (Cat. 2042), with ADC Enrichment Supplement, is used to isolate a wide variety of Mycobacteria, including *M. tuberculosis*, but with the exception of *M. bovis*, which is inhibited by glycerol.

This supplement provides essential substances for the growth of mycobacteria. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Albumin neutralizes toxic products that form during the development of the organisms. Catalase catalyzes the decomposition of hydrogen peroxide to water and oxygen. Dextrose is the fermentable carbohydrate providing carbon and energy.

Formula per vial

Sodium chloride (g)	8,5	Dextrose (g)	20
Bovine albumin fraction V (g)	50	Catalase (g)	0,03

Preparation

Add aseptically to 900 ml of Middlebrook Broth (Cat. 2042), autoclaved and cooled to 45-50 °C, 2 ml of glycerol and 0,5 g of Tween 80 . Mix well and distribute into sterile containers.

Instructions for use

Inoculation method:

- Take the inoculum with a sterile loop.
- Submerge the handle into the medium and shake gently.
- Incubate at 35±2 °C under 10% of CO₂, and observed after 21 days.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Lyophilized tablet	N/A	Amber	N/A

Microbiological test

Incubation conditions: (35±2 °C / 21 days).

Microrganisms	Specification
Mycobacterium tuberculosis H37Ra	Good growth

Storage

Temp. Min.: 2 °C
Temp. Max.: 8 °C

Bibliography

Middlebrook and Cohn, Am. J. Public Health, 48, 844 (1958).

Chelikani P, Fita I, Loewen PC (January 2004). "Diversity of structures and properties among catalases". Cell. Mol. Life Sci. 61 (2): 192–208. doi:10.1007/s00018-003-3206-5. PMID 14745498.