

COLETSOS MEDIUM

CAT N°: 4127

For the cultivation of *Mycobacterium tuberculosis* and other *Mycobacteria*

FORMULA IN g/litre

| | | | |
|---------------|-------|-----------------------|------|
| Egg | 494 | Gelatin | 98 |
| Salt Solution | 271 | Malachite Green | 9.80 |
| Egg Yolk | 123.6 | Oligodinamic Solution | 0.98 |

Final pH 7.0 ± 0.2 at 25°C

USES

COLETSOS MEDIUM is indicated for the cultivation of strict aerobic microorganisms. This medium allows the development and multiplication of the aerobic mycobacteria like *Mycobacterium tuberculosis*.

Mycobacterium from the samples may be present in small numbers or injured. This medium allows a good growth of Mycobacteria from this kind of samples. The number and size of colonies are significantly bigger and the aspect, which is usually smooth and moist, do not acquire the dry and rough aspect characteristic of this kind of microorganisms in other egg base media.

Potato Flour, Asparagine and Glutamic Acid provide nitrogen, vitamins, minerals and amino acids and all the nutrient essential for growth. Monopotassium Phosphate acts as a buffer system. Magnesium salts provide the magnesium ion required in a big variation of enzymatic reactions, including DNA replication and also act as a buffer system. Sodium pyruvate improves the aerotolerance of Mycobacterium species and act as a quenching agent of chemically produced toxic oxygen derivatives. Malachite Green suppresses the growth of contaminating bacteria. Glycerol is a carbon source. Gelatin solution and oligodinamic solution improves the growth of Mycobacterium and tornasol blue is a pH indicator.

Inoculate and incubate at 35 ± 2°C during 28 days.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium, with the solutions added, and after incubation at a temperature of 35 ± 2°C and observed after 28 days.

| Microorganisms | Growth |
|--|--------|
| <i>Mycobacterium tuberculosis</i> H37RV | Good |
| <i>Mycobacterium fortuitum</i> ATCC 6841 | Good |
| <i>Mycobacterium kansasii</i> ATCC 12478 | Good |

BIBLIOGRAPHY

Bailey and Scott. Diagnostic Microbiology. The C.V. Mosby Company, Saint Louis, 1978. Diagnostic Procedures and Reagents., APHA. Fifth Ed. 1970. New York. Raiza Nikolajuk of Irurzum and A.J.F., Irurzum. The Laboratory in the Diagnostics of Tuberculosis. Ed. Medical Panamericana, Buenos Aires, 1972.

STORAGE

Once opened keep powdered medium closed to avoid hydration.



GENTAUR

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