LITTMAN OXGALL AGAR

- For in vitro use only - Catalogue No. PL77

Our Littman Oxgall Agar is used for the selective isolation and cultivation of fungi from clinical and non-clinical samples.

In 1947, Littman described a selective medium for the isolation of pathogenic fungi. Comparative studies by Littman proved his medium to be superior to Sabouraud Dextrose Agar as it isolated three to four times the number of pathogenic fungi from a variety of clinical specimens. Littman Oxgall Agar can also be used for enumeration studies of air, soil, food, and other materials of sanitary importance.

The nutritional components include a mixture of peptones, and dextrose that supply essential elements necessary for growth. The selective agents, crystal violet and streptomycin inhibit bacterial overgrowth and allow for direct testing of grossly contaminated samples. The incorporation of Oxgall restricts the spreading growth of fungi and results in discrete colonies on the medium. The medium is poured extra thick due to the prolonged incubation time required to obtain good growth by some fungi; if desired the plates can also be partially sealed with masking tape to prevent excess dehydration of the medium.

Formula per Litre of Medium

Gelatin Peptone	5.0 g
Casein Peptone	2.5 g
Meat Peptone	2.5 g
Dextrose	10.0 g
Oxgall	15.0 g
Agar	16.0 g
Crystal Violet	0.01 g
Streptomycin	30 mg

pH 7.0 ± 0.2

Recommended Procedure

1. Allow medium to adjust to reach room prior to inoculation.
2. Using a heavy inoculum, perform a four-quadrant streak to obtain well-isolated colonies. For dermatophytes, nail and skin scrapings can be lightly embed into the medium. For clinical procedures it is recommended that duplicate plates be inoculated so that one set can be incubated at 35°C and the other at room temperature.
3. Incubate aerobically, one plate at 35°C and the other at room temperature.
4. Examine plates after 48 hours. Re-incubate plates and check plates intermittently for up to 21 days.

Interpretation of Results

Examine macroscopic and microscopic characteristics of selected colonies; subculture selected colonies to a non-selective medium to observe for possible chromogenesis and for maintenance of the organisms.

Additional biochemical and/or serological tests should be performed on isolated colonies from pure culture in order to complete identification.

- *Do not use this medium to culture Nocardia asteroids, Streptomyces or other organisms sensitive to streptomycin*

Quality Control

After checking for correct pH, colour, depth, and sterility, the following organisms are used to determine the growth performance of the completed medium.

Organism	Expected Result
Candida albicans ATCC 10231	Growth, blue colonies
Trichophyton mentagrophytes ATCC 13048	Growth, white fuzzy, filamentous colonies
Escherichia coli ATCC 25922	Inhibition

Storage and Shelf Life

Our Littman Oxgall Agar should be stored away from direct light at 4°C to 8°C with the medium side uppermost to prevent excessive accumulation of moisture on the agar surface. Under these conditions this medium has a shelf life of 8 weeks from the date of manufacture.

References

1. Littman ML. Culture medium for primary isolation of fungi. Science 1947; 106:109-11.
2. Littman ML. Growth of pathogenic fungi on a culture media. Am J Clin Pathol 1948; 18:409-20.
3. MacFaddin JF. Media for isolation-cultivation-identification-maintenance of medical bacteria, Vol I. Baltimore, MD: Williams & Wilkins, 1985.
4. Difco Manual. 11th edition. Difco Laboratories: Maryland 1998.

Original: May 2003
Revised / Reviewed: October 2014