

Malt Extract Broth

For the detection, isolation and enumeration of fungi, particularly yeasts and moulds, in various materials and for the cultivation of test strains for the microbiological vitamin assays.

Mode of Action

If fungal counts are to be performed, the pH value of the culture medium should be adjusted to 3.5 to suppress the growth of the bacterial flora.

REISS (1972) recommends a modified malt extract agar for the selective cultivation of *Aspergillus flavus*. According to RAPP (1974), addition of certain indicator dyes to malt extract agar allows differentiation of yeast and bacterial colonies.

Typical Composition (g/litre)

Malt extract 17.0.

Preparation

Suspend 17.0 g/litre, dispense into suitable containers, autoclave under mild conditions (10 min at 115 °C).

pH: 4.8 ± 0.2 at 25 °C.

The prepared broth is clear and yellow.

Experimental Procedure and Evaluation

Depend on the purpose for which the media are used.

Incubation: 7 days at 28 °C aerobically (yeasts: 3 days)

Literature

RAPP, M.: Indikatorzusätze zur Keimdifferentenzierung auf Würze- und Malzextrakt-Agar. - **Milchwiss.**, **29**; 341-344 (1974)

REISS, J.: Ein selektives Kulturmedium für den Nachweis von *Aspergillus flavus* in verschimmeltem Brot. - **Zbl. Bakt. Hyg. I. Abt. Orig. A** **220**; 564-566.

Ordering Information

Product	Merck Cat. No.	Pack size
Malt Extract Broth	1.05397.0500	500 g
L(+)-Tartaric acid	1.00804.0250	250 g
Lactic acid about 90 % purified	1.00366.0500	500 ml

Quality control of Malt Extract Broth

Test strains	Growth
<i>Candida albicans</i> ATCC 10231	good / very good
<i>Saccharomyces cerevisiae</i> ATCC 9763	good / very good
<i>Saccharomyces cerevisiae</i> ATCC 9080	good / very good
<i>Geotrichum candidum</i> DSMZ 1240	good / very good
<i>Rhodotorula mucilaginosa</i> DSMZ 70403	good / very good
<i>Penicillium commune</i> ATCC 10428	good / very good
<i>Aspergillus niger</i> ATCC 16404	good / very good
<i>Trichophyton ajelloi</i> ATCC 28454	good / very good