

Technical Information

ME Growth Agar

Product Code: G1050

ME Growth Agar is used for the conjugation and sporulation of *Schizosaccharomyces pombe*

Composition :

Ingredients	Grams/Litre
Malt extract	30.00
Adenine	0.05
Histidine	0.05
Leucine	0.05
Uracil	0.05
Agar	15.00

** Formula adjusted, standardized to suit performance parameters

Methodology

Suspend 45.20 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and dispense as desired.

Principle and Interpretation

ME Growth Agar is used for the conjugation and sporulation of *Schizosaccharomyces pombe*. Yeasts are unicellular eukaryotes and extensively studied model organism in molecular genetics. The fission yeast *Schizosaccharomyces pombe* is a model eukaryote which is very useful in studies of cell cycle and chromosome dynamics. These cells maintain their shape by growing through the cell tips and divide by medial fission to produce two daughter cells of equal sizes that makes them a powerful tool in cell cycle research. It was first developed as an experimental model in the 1950's for studying genetics (1, 2) and for studying the cell cycle (3, 4).

Schizosaccharomyces Pombe has two mating types, h+ and h- and is stable as a haploid or diploid. These yeast strains undergo conjugation and sporulation only when starved for nutrients. ME Growth Agar is used for the conjugation and sporulation of *Schizosaccharomyces pombe* strains in various molecular microbiology procedures.

Quality Control

Appearance of Powder :

Light yellow coloured, homogeneous, free flowing powder.

Gelling :

Firm, comparable with 1.5% Agar gel.

Colour and Clarity :

Light yellow coloured, clear to slightly opalescent gel in Petri plates.

Cultural Response :

Cultural characteristics observed after an incubation at 35-37°C for 18 - 48 hours.

Organisms (ATCC)

Schizosaccharomyces pombe

Growth

good-luxuriant

Storage and Shelf Life

Store below 30°C and the prepared medium at 2 - 8°C. Use before expiry date on the label.

References

1. Leupold U. (1950) CR Trav Lab Carlsberg Ser Physiol 24:381-480.
2. Leupold U. (1993) The origins of *Schizosaccharomyces pombe* genetics. In: Hall MN, Linder P. eds. The early Days of Yeast Genetics. New York. Cold Spring Harbor Laboratory Press. 125-128.
3. Mitchinson JM. (1975) Exp Cell Res 13:244-262.
4. Mitchinson JM. (1990) Bioessays 4:189-191.

Disclaimer :

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