

Technical Information

MB Growth Medium

Product Code: G1059

MB Growth Medium is a minimal defined media for the growth of *Schizosaccharomyces pombe*.

Composition**

Ingredients	Grams/Litre
Glucose	5.00
Potassium dihydrogen phosphate	0.50
Potassium acetate	0.36
Magnesium sulphate, 7H ₂ O	0.50
Sodium chloride	0.10
Calcium chloride, 2H ₂ O	0.10
Ammonium sulphate	5.00
Boric acid	500 mcg
Copper sulphate, 5H ₂ O	40 mcg
Potassium iodide	100 mcg
Ferric chloride, 6H ₂ O	200 mcg
Manganese sulphate, H ₂ O	400 mcg
Sodium molybdate, 2H ₂ O	200 mcg
Zinc sulphate, 7H ₂ O	400 mcg
Biotin	10 mcg
Calcium pantothenate	0.001
Nicotinic acid	0.010
Myoinositol	0.010
Uracil	0.150
Leucine	0.150 (for leucine strains)

** Formula adjusted, standardized to suit performance parameters

Methodology

Suspend 12 grams in 1000 ml distilled water. Sterilize by filtration through a 0.22µm filter or autoclave at 10 lbs pressure (115°C) for 20 minutes. Mix well and dispense as desired.

Principle and Interpretation

MB Growth Medium is a minimal defined media for the growth 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). MB Growth Medium is used for the maintenance and propagation of *S. pombe* in various molecular microbiology procedures. It functions as a defined medium for fission yeast growth and it contains glucose and other supplements. Glucose serves as the carbon source.

Quality control

Appearance of Powder :

Light yellow coloured, homogeneous, free flowing powder.

Colour and Clarity :

Light yellow coloured, clear solution without any precipitate.

Cultural Response :

Cultural characteristics observed after an incubation at 25-30°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.

Reference

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 :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performance parameters.