RM Base Medium

Cat. 1538

Solid medium for the maintenance and propagation of the promoter PL in the E. coli strains GI724, GI826 and GI698

Practical information

Aplications	Categories
Preparation and recovery of competent cells	Escherichia coli

Industry: Culture media for Molecular biology

Principles and uses

RM Base Medium is used for the maintenance and propagation of the promoter PL in E. coli strains GI724, GI826 and GI698 and to increase the yield of plasmid for sequencing positive clones. These strains have the gene Lambda cI repressor, under the control of the promoter tryptophane inducible, trp. This medium has low tryptophane levels.

Casaminoacids provides the necessary nutrients and cofactors required for excellent growth of recombinant strains of E. coli. Due to its higher degree of digestion, casaminoacids are an excellent source of free aminoacids. Phosphates act as a buffer system. Ammonium chloride and magnesium sulfate provide essential ions. Sodium chloride supplies essential electrolytes for transport and osmotic balance. To promote growth it may require the addition of glucose.

Formula in g/L

Ammonium chloride	1	Casaminoacids	20
Disodium phosphate	6	Magnesium citrate	0,095
Sodium chloride	0,5	Monosodium Phosphate	3

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

Preparation

Suspend 30.6 grams of the dehydrated medium in 900 ml of distilled water, add 20 ml of 50% glycerol and adjust to a final volume of 1000 ml. Mix well. Heat with frequent agitation until complete dissolution. Distribute in appropriate containers and sterilize in the autoclave at 121 °C for 15 minutes. Add 1 ml/liter of 100 µg/ml of ampicillin under sterile conditions and mix well.

Instructions for use

- Inoculate and incubate at a temperature of 35±2 °C for 18 -24 hours.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Beige	Amber	7,0 ± 0,2

Microbiological test

Incubation conditions: (35±2 ºC / 18-24 h).

Microorganisms	Specification
Escherichia coli ATCC 23724	Good growth
Escherichia coli ATCC 33694	Good growth
Escherichia coli ATCC 33849	Good growth
Escherichia coli ATCC 39403	Good growth

Escherichia coli ATCC 47014	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

La Vallie, E, R. et al.(1 992) Bio/Technology 11: 187-1 93. Mieschendahl, M. et al.(1 996) Bio/Technology 4: 802-808.