

Induction Base Medium

Cat. 1540

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

Practical information

Applications	Categories
Preparation and recovery of competent cells	Escherichia coli

Industry: Molecular biology / Microbiological Culture Media

Principles and uses

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

Casaminoacids provide the necessary nutrients and cofactors for a good growth of recombinant E. coli strains. Due to their greater degree of digestion, casaminoacids are an excellent source of free amino acids. Phosphates act as a buffer system. Ammonium chloride and magnesium sulfate provide essential ions for transport and osmotic balance.

Formula in g/L

Ammonium chloride	1	Casaminoacids	2
Disodium phosphate	6	Monopotassium phosphate	3
Sodium chloride	0,5	Magnesium chloride	0,095

Preparation

Suspend 12,6 grams of medium in one liter of distilled water. Dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 °C for 15 minutes. Cool to room temperature, add 25 ml of a 20% glucose solution and 1 ml of ampicillin (100 g/ml) under sterile conditions. Mix well.

Instructions for use

Consult an appropriate reference for recommended test procedures.

Quality control

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

Microbiological test

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

Microorganisms	Specification
Escherichia coli ATCC GI724	Good growth

Storage

Temp. Min.: 2 °C

Temp. Max.:25 °C

Bibliography

La Vallie, E, R. et al.(1 992) Bio/Technology 11: 187-193. Mieschendahl, M. et al.(1 996) Bio/Technology 4: 802-808.