

NZYM Broth



Medium used for the cultivation of recombinant strains of *Escherichia coli*.

• CONTENTS (Liter)

Pancreatic Digest Of Casein	10.0 g
Yeast Extract	5.0 g
Sodium Chloride	5.0 g
Magnesium Sulfate	0.98 g
Final pH = 7.0 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 21.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in tubes.

• INTERPRETATION

NZYM Broth is a medium used for the cultivation of recombinant strains of *Escherichia coli*. Pancreatic digest of casein and yeast extract provide carbon, nitrogen, vitamins and minerals for growth of recombinant strains *E.coli*. Sodium chloride maintains the osmotic balance. Magnesium sulfate is a source of magnesium ions required in a variety of enzymatic reactions, including DNA replication.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear.

Color: light amber.

Incubation conditions: 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	23724	50-100	good

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Davis, Dibner and Battey. 1986. Basic methods in molecular biology. Elsevier, New York, N.Y.
2. Sambrook and Russell. 2001. Molecular cloning: a laboratory manual, 3rd ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.
3. Ausubel, Brent, Kingston, Moore, Seidman, Smith and Struhl. 1994. Current protocols in molecular biology, vol 1. Current Protocols, New York, N.Y.

• PACKAGE

Cat. No : MB-N1216 NZYM Broth	500 G
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