



Product Information

HANAHAN'S BROTH (SOB MEDIUM)

Product Number **H 8032**

Product Description

Hanahan's Broth is recommended for use in cultivation of recombinant strains of *Escherichia coli*. It is a nutritionally rich growth medium for use in the preparation and transformation of competent cells. For the intake of DNA, competent cells are first grown in Hanahan's Broth to prepare them for perforation. For the survival of perforated, competent cells, a rich, isotonic environment is needed. Hanahan's Broth with 0.4% dextrose (D 9434) is used in the final stage of transformation, which provides a carbon and energy source for *Escherichia coli* to mend the perforations and for replication.

Casein enzymic hydrolysate and yeast extract supply nitrogenous compounds and growth factors for recombinant *Escherichia coli*. Potassium chloride and sodium chloride maintain the isotonic condition. Magnesium sulfate is added to the medium as a necessary component for DNA replication.

Components

Item	g/L
Casein Enzymic Hydrolysate	20.00
Yeast Extract	5.00
Sodium Chloride	0.50
Magnesium Sulfate	2.40
Potassium Chloride	0.186

Final pH (at 25 °C) 7.0 ± 0.2

Precautions and Disclaimer

For laboratory use only. Not for drug, household or other uses.

Preparation Instructions

Suspend 28 grams of Hanahan's Broth in 1000 mls of distilled water. Heat gently to dissolve the medium completely. Dispense in tubes and sterilize by autoclaving at 15 lbs. (121 °C) for 15 minutes.

Storage

Store the dehydrated medium at 24 °C and the prepared medium at 2-8 °C.

Product Profile

Appearance	Light beige colored, homogeneous, free flowing powder.
Color and Clarity	Medium amber colored, clear solution without any precipitate.
Cultural Response	Cultural characteristics are observed after 18-24 hours at 35 °C.

Organism	(ATCC)	Growth
<i>Escherichia coli</i>	(53868)	good-luxuriant

References

1. Hanahan, D., (1983). J. Mol. Biol. 166, 557.
2. Sambrook, J., et al., (1989). Molecular Cloning: A Laboratory Manual. 2nd Edition. Cold Spring Harbor Lab. Cold Spring Harbor, N.Y.
3. American Type Culture Collection, Manassas, Va., USA.