

YT HiVeg™ Broth

MV1251

YT HiVeg Broth is used for the cultivation of recombinant strains of *Escherichia coli*.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	16.0
Yeast extract	10.0
Sodium chloride	5.0

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 31.0 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

YT HiVeg Broth is prepared by using HiVeg hydrolysate which is free from BSE/TSE risks. YT HiVeg Broth is the modification of YT Broth which is recommended for use in the cultivation of recombinant strains of *Escherichia coli* (1-3) and also for propagating M13 bacteriophages (2). YT HiVeg Broth is a nutritionally rich growth medium containing HiVeg hydrolysate and yeast extract which supply nitrogenous compounds, vitamin B complex and



MV1251 YT HiVeg Broth

1. Control
2. *Escherichia coli* (23724)
3. *Escherichia coli* (53868)

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV1251 HiVeg hydrolysate	M1251 Casein enzymic hydrolysate

Recommended for : Cultivation of recombinant strains of *Escherichia coli*

Reconstitution : 31.0 g/l

Quantity on preparation (500g): 16.12 L

pH (25°C) : 7.0 ± 0.2

Supplement : None

Sterilization : 121°C / 15 minutes.

Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

other essential nutrients and co-factors. Sodium chloride helps in maintaining the osmotic equilibrium of the medium. Components of this medium provide essential nitrogenous compounds, for enhanced reproduction of bacteriophage without exhausting the host. *Escherichia coli* grows more rapidly as this medium provides nutrients that cells would otherwise have to synthesize.

Quality Control :

Appearance of powder

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Colour and clarity

Light amber coloured, clear solution without any precipitate.

Reaction

Reaction of 3.1% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

Organisms (ATCC)

- Escherichia coli* (23724)
- Escherichia coli* (53868)

Growth

- good-luxuriant
- good-luxuriant

References :

1. Sambrook J., Fritsch E.E. and Maniatis T., 1989, Molecular cloning : A Laboratory Manual, 2nd ed., Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.
2. Ausubel F.M., Brent R. et al, 1994, Current Protocols in Molecular Biology, Vol. 1, Current Protocols, New York, N.Y.
3. Davis L.G., Dibner M.D., Battey J.F., 1986, Basic Methods in Molecular Biology, Elsevier, New York, N.Y.