

## Technical Information

### YT MiVeg Broth

**Product Code : VM2251**

**Application:-** YT MiVeg Broth is used for the cultivation of recombinant strains of *Escherichia coli*.

### Composition\*\*

Ingredients	Gms / Litre
MiVeg 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.

### Principle & Interpretation

YT MiVeg Broth is prepared by adding MiVeg hydrolysate instead of Casein enzymic hydrolysate thereby making the medium BSE/TSE risks free. YT MiVeg Broth is the modification of YT Broth recommended for the cultivation of recombinant strains of *Escherichia coli* (1-3) and also for propagating M13 bacteriophages (2). YT MiVeg Broth is a high nutritious growth medium. MiVeg hydrolysate and yeast extract provides nitrogenous compounds, vitamin B complex and certain other essential growth nutrients and co-factors. Sodium chloride maintains the osmotic equilibrium of the medium. Medium ingredients supplies essential nitrogenous compounds needed 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.

### Methodology

Suspend 31.0 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat if necessary to dissolve the medium completely. Distribute as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

### Quality Control

#### Physical Appearance

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

#### Colour and Clarity of prepared medium

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.

#### pH Range

6.8-7.2

#### Cultural Response/Characteristics

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

## Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

**Prepared Media:** 2-8° in sealable plastic bags for 2-5 day.



**VM2251 YT MiVeg Broth**

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

## Further Reading

1. Sambrook J., Fritsch E.E. and Maniatis T., 1989, Molecular cloning : A Laboratory Manual, 2<sup>nd</sup> 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. I, 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.

## Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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