

2X YT Medium, Liquid

Catalog Number **MM 008-01**
 Storage Temperature 2~8°C

Product Description

2X YT medium is widely used to culture microbes such as *E. coli*. 2X YT Medium is nutritionally rich and developed for growth of recombinant strains of *E. coli*. This formulation is also suitable for the growth and maintenance of M13 phages and other fibrous bacteriophages for sequencing and phage display research. 2X YT Medium is formulated with nitrogen and vitamins that allow bacteriophage to reproduce in large quantities without fatiguing the host. *E. coli* grows faster in this enriched medium because it provides amino acids, nucleotide precursors, vitamins and other metabolites that the cell would otherwise have to synthesize.

Storage/Stability

2X YT medium should be stored at 2~8°C. Deterioration of 2X YT medium may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. Product label bears expiration date.

Biological Performance Characteristics

2X YT medium contained tryptone, yeast extract and sodium chloride. Peptides and peptones are provided by tryptone. Vitamins and certain trace elements are provided by yeast extract. Sodium ions for transport and osmotic balance are provided by sodium chloride. Tryptone is used to provide essential amino acids to the growing bacteria, while the yeast extract is used to provide a plethora of organic compounds helpful for bacterial growth. 2X YT medium tested bacteria culture.

Precautions

For *In Vitro* Use Only

Components	g/L MM 008-01
Bacto-Tryptone	16.0
Bacto-Yeast extract	10.0
Sodium chloride	5.0

Product Profile

Appearance	Yellow transparent solution
pH at RT	6.8 ~ 7.2
Sterility	Sterilized by Autoclave system(121°C, 15 lb/sq. in., 20 min) Sterility tests are performed in accordance with protocols described in SOP.

References

Ausubel, F. M., R. Brent, R. E. Kingston, D. D. Moore, J. G. Seidman, J. A. Smith, K. Struhl (ed.). 1994. Current Protocols in Molecular Biology. Vol. 1. Current Protocols. New York, N. Y.
 Green, Michael R., and Joseph Sambrook. Molecular cloning: a laboratory manual. New York: Cold Spring Harbor Laboratory Press, 2012.