

CM 20,001– 2 XYT GROWTH MEDIUM

INTENDED USE

Optimized formulation for the growth and maintenance of M13 phage or other filamentous ss DNA bacteriophages.

PRODUCT SUMMARY AND EXPLANATION

2XYT Growth Medium is an optimized formulation for the growth and maintenance of M13 phage or other filamentous ssDNA bacteriophages. This media is 2 times richer than the YT media. This media was originally formulated as a nutritionally enriched growth medium for growth of recombinant strains of Escherichia coli and can also be used for propagation of M13 bacteriophage. It permits larger quantity of phage production without exhausting the host.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	16.000
Yeast extract	10.000
Sodium chloride	5.000

PRINCIPLE

The medium consists of Yeast extract and Tryptone which provide all the required amino acids, nucleotide precursors, vitamins and other metabolites and as a result the cells grow faster in this medium. Sodium chloride provides sodium ions for transport and osmotic balance.

INSTRUCTION FOR USE

Dissolve 31.0 grams in 1000 ml purified/distilled water.

Heat to boiling to dissolve the medium completely.

Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow coloured, homogeneous, free flowing powder.

Appearance of prepared medium : Light yellow coloured, clear solution without any precipitate.

pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good-luxuriant	35-37°C	18-48 Hours

PACKAGING:



In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

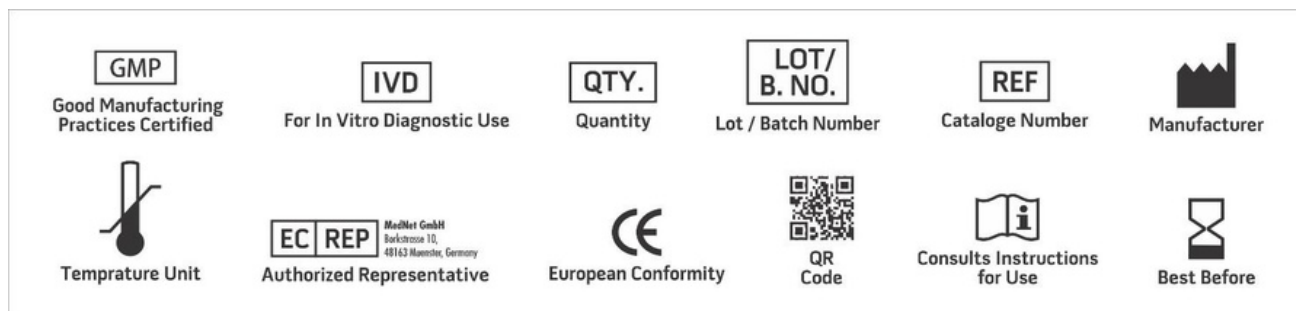
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Difcomanual 11th ed., Sparks, MD (1998), 22-23
2. Assubel, F.M., R. Brent, R.E. Kingston, D.D. Moore, J.G. Seidman, J.A. Smith and K. Struhl, Current protocols in molecular biology, vol. 1, Current Protocols, New York, (1994)
3. Davis, L.G., M.D. Dibner and J.F. Battey, Basic methods in molecular biology, Elsevier, new York, (1986).



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only

