TMV 1477 – TERRIFIC BROTH (VEG.) (TARTOFF-HOBBS BROTH)

INTENDED USE

A buffered enriched medium for propagation of recombinant *E. Coli*.

PRODUCT SUMMARY AND EXPLANATION

This medium is prepared by using Veg hydrolysate which is free from BSE/TSE risks associated with animal based peptone. Terrific Veg Broth is the modification of Terrific Broth which is a very nutritious medium designed by Tartoff and Hobbs to improve the yield of plasmid in *Escherichia coli*. Sambrook et al further recommended the protocol for the inoculation and incubation of organisms.

COMPOSITION

Ingredients	Gms / Ltr
Veg. hydrolysate	12.000
Yeast extract	24.000
Monopotassium phosphate	9.400
Dipotassium phosphate	2.200

PRINCIPLE

The medium contains Veg hydrolysate and yeast extract supply the necessary nutrients and cofactors for the excellent growth of recombinant strains of *Escherichia coli*. Recombinant strains have an extended growth phase in this medium. High concentration of yeast extract and Veg hydrolysate in the medium facilitates higher cell yields. Phosphates provide good buffering action to the medium and prevent cell death due to a drop in pH. Glycerol serves as the carbon and energy source to the organisms. Unlike glucose, glycerol is not fermented to acetic acid.

INSTRUCTION FOR USE

- Suspend 47.6 grams in 1000 ml distilled water containing 4 ml glycerol.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

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

pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period

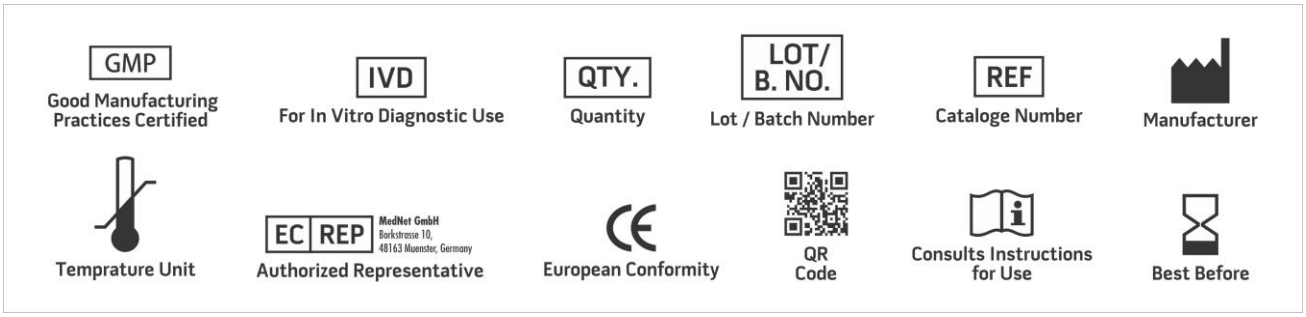
Escherichia coli	23724	50-100	Good	35-37°C	18-24 Hours
Escherichia coli	39403	50-100	Good	35-37°C	18-24 Hours
Escherichia coli	47014	50-100	Good	35-37°C	18-24 Hours
Escherichia coli	53868	50-100	Good	35-37°C	18-24 Hours

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. Tartoff K.D. and Hobbs C.A., 1987, Improved Media for Growing Plasmid and Cosmid Clones, Bethesda Res. Lab. Focus, 9:12.
2. Sambrook J., Fritsch, E.E., and Maniatis T., 1989, Molecular cloning :- A laboratory manual, 2nd ed., Cold Spring Harbor Lab., Cold Spring Harbor, N.Y.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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