

# Tryptone Water



Medium used for the detection of *Escherichia coli* in food and water samples.

## • CONTENTS (Liter)

Tryptone	10.0 g
Sodium Chloride	5.0 g
Final pH = 7.3 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 15.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in tubes. If necessary, dispense the medium before autoclave.

## • INTERPRETATION

Tryptone Water is a medium used for the detection of *Escherichia coli* in food and water samples. Tryptone is a good substrate for indole production because of its high tryptophan content. Tryptophan is hydrolyzed and deaminated to produce indole. The indole can be detected by the Kovac's Reagent, which contain an aldehyde group. The indole combines with aldehyde to give red color in the alcohol layer. Sodium chloride maintains the osmotic balance.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 18 - 24 hours. Add 0.2 mL of Kovac's Reagent(MB-KV-30) to the tubes. A red color constitutes a positive indole test, no change in the original color of the reagent constitutes a negative indole test. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

### Prepared medium

Appearance: clear to slightly opalescent.

Color: light amber.

Incubation conditions: 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Indole Reaction
<i>Escherichia coli</i>	25922	50-100	good	+
<i>Enterobacter cloacae</i>	13047	50-100	good	—
<i>Enterobacter aerogens</i>	13048	50-100	good	—
<i>Klebsiella pneumoniae</i>	13883	50-100	good	—

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

**• REFERENCES**

1. MacFaddin. 2000. Biochemical tests for identification of medical bacteria, 3rd ed. Lippincott Williams & Wilkins, Baltimore, Md.
2. Rice E.W., Baird R.B., Eaton A. D., and Clesceri L. S. (Eds.), 2012, Standard Methods for the Examination of Water and Wastewater, 22nd Ed., APHA, Washington, D.C.
3. ISO / DIS 3811-1979. Meat and meat products. Detection and enumeration of presumptive coliform bacterial and presumptive E. coli.

**• PACKAGE**

Cat. No : MB-T1206 Tryptone Water	500 G
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