

TRYPTOPHAN BROTH

Dehydrated medium for the production of indole by microorganisms

TYPICAL FORMULA (g/L)

Tryptone	10.0
Sodium chloride	5.0
DL Tryptophan	1.0
Final pH 7.5 ± 0.2	

DESCRIPTION

TRYPTOPHAN BROTH is used to differentiate microorganisms that produce indole.

The medium is, also, recommended by ISO 6579 for the indole test for the confirmation procedures of *Salmonella* colonies.

PRINCIPLE

Tryptone provide nitrogen, carbon, tryptophan, sulphur and other essential growth factors. Sodium chloride maintains the osmotic balance of the medium. Tryptophan is the substrate to perform the indole test. The microorganisms, that possess the enzyme tryptophanase, degrade tryptophan to produce indole and other products. Indole production is determined by the formation of a red-violet colour complex upon application of Kovac's Reagent (code 80270). If present, indole reacts with the aldehyde group of p-dimethylaminobenzaldehyde with the development of a red ring.

PREPARATION

Suspend 16.0 g of powder in 1 litre of distilled or deionized water.

Heat to boiling and shake until completely dissolved. Sterilise at 121 °C for 15 minutes. Dispense in final test tubes.

TECHNIQUE

Inoculate a tube containing 5mL of **TRYPTOPHAN BROTH** and incubate at 36 ± 1 °C for 24 ± 3 hours.

After incubation, add 1 mL of Kovac's Reagent. The formation of a red ring indicates a positive reaction.

INTERPRETATION OF RESULTS

The formation of a red ring indicates a positive reaction.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed until the expiry date on the label or until signs of deterioration or contamination are evident.

Store prepared media at 2-8 °C.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Murray, Baron, Pfaller, Tenorev and Tenover (ed), Manual of Clinical Microbiology, 7th ed. American Society for Microbiology, D.C.
2. ISO 6579:1993- Microbiology-General guidance on methods for the detection of *Salmonella*.



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PRODUCT SPECIFICATIONS

NAME
TRYPTOPHAN BROTH

PRESENTATION
Dehydrated culture medium

STORAGE
10-30 °C

PACKAGING

Code	Content	Packaging
610197	500 gr	500 gr of powder in plastic bottle
620197	100 gr	100 gr of powder in plastic bottle

pH OF THE MEDIUM

7.5 ± 0.2

USE

TRYPTOPHAN BROTH is used to differentiate microorganisms that produce indole.
The medium is, also, recommended by ISO 6579 for the indole test for the confirmation procedures of *Salmonella* colonies.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE of the MEDIUM

Dehydrated medium

Appearance: free-flowing, homogeneous.

Colour: amber

Prepared medium

Appearance: clear

Colour: amber

SHELFLIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control

7 days at 25 ± 1°C, in aerobiosis

7 days at 36 ± 1°C, in aerobiosis







- Microbiological control

Inoculum for productivity: 10-100 UFC/ml

Incubation conditions: 24 ± 3 hours at 36 ± 1°C, in aerobiosis

Microorganisms		Growth	Indole test
<i>Escherichia coli</i>	ATCC 25922	Good	positive
<i>Salmonella typhimurium</i>	ATCC 14028	Good	negative

TABLE OF SYMBOLS

LOT Batch code	 Temperature limitation	 Manufacturer	 Contains sufficient for <n> tests	IVD <i>In vitro</i> Diagnostic Medical Device
REF Catalogue number	 Keep away from heat	 Use by	 Caution, consult accompanying documents	



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