

TM 1159 – CARBOHYDRATE CONSUMPTION BROTH BASE

INTENDED USE

For cultivation and differentiation of *Listeria* species.

PRODUCT SUMMARY AND EXPLANATION

Carbohydrate Consumption Broth is used for the cultivation and differentiation of *Listeria* species and formulated as per Atlas. It is also recommended by FDA and ISO with a slight difference in the concentration of bromocresol purple. Differentiation is based on fermentation of glucose, xylose, rhamnose, ribose, α-methyl-D-mannoside and mannitol. Carbohydrate utilization test: Inoculate each kind of carbohydrate fermentation broth with one loopful of inoculum. Incubate for 7 days at 37°C. Observe daily for acid induced colour change and gas formation. Sometimes weak positive reactions may occur after 48 hours of incubation.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Sodium chloride	5.000
Beef extract	1.000
Bromocresol purple	0.100

PRINCIPLE

Proteose peptone and beef extract in the medium provide carbon and nitrogen compounds including essential amino acids, vitamins and trace ingredients for bacterial metabolism. Bromocresol purple is the pH indicator, which indicates acid production by turning yellow in colour.

INSTRUCTION FOR USE

- Dissolve 16.1 grams in 990 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into tubes containing inverted Durhams tubes.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Aseptically add 10 ml separately sterilized carbohydrate solution to give a final concentration of 0.5%. Mix well.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to beige homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured, clear solution without any precipitate.
pH (at 25°C)	: 6.8±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATC C	Inoculum (CFU/ml)	Growth	w/o carbohydrate acid	w/o carbohydrate gas	w/ rhamnose (acid)	w/ rhamnose (gas)	Incubation Temperature	Incubation Period

<i>Escherichia coli</i>	2592 2	50-100	Good-luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction	35-37°C	18-48 Hours
<i>Listeria monocytogenes subsp. serovar 1</i>	1911 1	50-100	Good-luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction	35-37°C	18-48 Hours
<i>Listeria monocytogenes</i>	1911 2	50-100	Good-luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction	35-37°C	18-48 Hours
<i>Listeria monocytogenes</i>	1911 7	50-100	Good-luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i>	2592 3	50-100	Good-luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction	35-37°C	18-48 Hours
<i>Listeria monocytogenes</i>	1911 8	50-100	Good-luxuriant	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction	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. Atlas R. M., 2004, Handbook of Microbiological Media, 3rd Edition, CRC Press, Washington D. C.
2. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, D.C.
3. International Organization for Standardization (ISO), 1993, Draft ISO/DIS 10560.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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