

NUTRIENT BROTH

Medical laboratories media is used for the general cultivation of less fastidious microorganisms, can be enriched with blood or other biological fluids.

REF: BS.1/NB01.100.0100	100 Gram	REF: BS.1/NB01.250.01250	250 Gram
REF: BS.1/NB01.500.0500	500 Gram		

CLINICAL SIGNIFICANCE

Nutrient media are basic culture media used for maintaining microorganisms, cultivating fastidious organisms by enriching with serum or blood and are also used for purity checking prior to biochemical or serological testing.

METHOD PRINCIPLE

Nutrient Broth has the formula originally designed for use in the Standard Method for Examination of Water and Waste water. It is one of the several non-selective media useful in routine cultivation of microorganisms. It can be used for the cultivation and enumeration of bacteria which are not particularly fastidious. Addition of different biological fluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidious organisms.

Peptone, HM peptone B and yeast extract provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

MEDIA COMPOSITION

Item	Concentration
Yeast Extract	1.5 g/L
Peptone	5 g/L
Beef Extract	1.5 g/L
Sodium Chloride	5 g/L
Final pH (at 25°C)	7.4±0.2

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
 - Do not pipette by mouth.
 - In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
 - Respect country requirement for waste disposal.
- S56:** dispose of this material and its container at hazardous or special waste collection point.
S57: use appropriate container to avoid environmental contamination.
S61: avoid release in environment.

For further information, refer to the Nutrient broth material safety data sheet.

MEDIA PREPARATION, STORAGE AND STABILITY

BioScien Nutrient broth media are stable until expiration date stated on label when properly stored at 10-30°C. Nutrient broth media is

prepared by suspend 13 grams of the medium in one liter of distilled water. Heat, if necessary, to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Deterioration

BioScien Nutrient broth medium is cream to yellow homogeneous free flowing powder. If there are any physical changes, discard the medium.

Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration), and contaminations.

SPECIMEN COLLECTION AND PRESERVATION

Clinical samples - faeces, urine etc.; Food and dairy samples; Water samples.

EQUIPMENT REQUIRED NOT PROVIDED

- Sterile cups
- Sterile tubes or flasks as desired
- Incubator
- Autoclave

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact **BioScien** technical support.











PERFORMANCE CHARACTERISTICS

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Nutrient Broth	Expected results
<i>Escherichia coli</i> ATCC 25922	Good growth
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good growth
<i>Salmonella Typhi</i> ATCC 6539	Good growth
<i>Staphylococcus aureus</i> subsp.aureus ATCC 25923	Good growth
<i>Streptococcus pyogenes</i> ATCC 19615	Good growth

REFERENCES

1. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C
2. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock. D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
6. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

SYMBOLS IN PRODUCT LABELLING	
 For in-vitro diagnostic use	 Number of <n> test in the pack
 Batch Code/Lot number	 Caution
 Catalogue Number	 Do not use if package is damaged
 Temperature Limitation	 Consult Instruction for use
 Expiration Date	
 Manufactured by	



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