
HEART INFUSION BROTH

INTENDED USE

Remel Heart Infusion Broth is a liquid medium recommended for use in qualitative procedures for isolation of a wide variety of microorganisms.

SUMMARY AND EXPLANATION

In 1918, Huntoon prepared a broth medium using fresh beef heart and peptone for the cultivation of bacteria.¹ This medium became known as Heart Infusion Broth. Huntoon demonstrated it could be used to support the growth of nutritionally fastidious microorganisms without the addition of enrichment, such as animal blood. Heart Infusion Broth can also be used for mass cultivation of bacteria required in vaccine preparation and animal blood can be added to enable determination of hemolytic reactions by organisms.^{2,3}

PRINCIPLE

Heart infusion solids and casein peptone supply nitrogenous compounds and amino acids necessary for the growth of nutritionally fastidious bacteria. Sodium chloride provides essential electrolytes and maintains osmotic equilibrium. Yeast extract is a source of energy and supplies B vitamins to enhance bacterial growth.

REAGENTS (CLASSICAL FORMULA)*

Casein Peptone.....	13.0 g	Yeast Extract	5.0 g
Sodium Chloride.....	5.0 g	Heart Infusion Solids	2.0 g
		Demineralized Water	1000.0 ml

pH 7.4 ± 0.2 @ 25°C

*Adjusted as required to meet performance standards.

PRECAUTIONS

This product is For Laboratory Use only. It is not intended for use in the diagnosis of disease or other conditions.

PREPARATION OF DEHYDRATED CULTURE MEDIUM

1. Suspend 25 grams of medium in 1000 ml of demineralized water.
2. Heat to boiling with agitation to completely dissolve.
3. Sterilize by autoclaving at 121°C for 15 minutes or following established laboratory procedures.
4. Dispense into appropriate containers.

PROCEDURE

1. Consult current editions of appropriate references for the recommended procedure for sample preparation, inoculation, incubation, and testing.

QUALITY CONTROL

Each lot number of Heart Infusion Broth has been manufactured, packaged, and processed in accordance with current Good Manufacturing Practice regulations. All lot numbers have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, sample results should not be reported.

CONTROL

Escherichia coli ATCC® 25922
Pseudomonas aeruginosa ATCC® 27853
Staphylococcus aureus ATCC® 25923

INCUBATION

Ambient, 18-24 h @ 33-37°C
Ambient, 18-24 h @ 33-37°C
Ambient, 18-24 h @ 33-37°C

RESULTS

Good growth
Good growth
Good growth

BIBLIOGRAPHY

1. Huntoon, F.M. 1918. J. Infect. Dis. 23:169-172.
2. Murray, P.R., E.J. Baron, J.H. Jorgensen, M.L. Landry, and M.A. Pfaller. 2007. Manual of Clinical Microbiology. 9th ed. ASM Press, Washington, D.C.
3. MacFaddin, J.F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Williams & Wilkins, Baltimore, MD.

Refer to the front of Remel *Technical Manual of Microbiological Media* for **General Information** regarding precautions, product storage and deterioration, sample collection, storage and transportation, materials required, quality control, and limitations.

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remel

12076 Santa Fe Drive, Lenexa, KS 66215, USA

General Information: (800) 255-6730 Website: www.remel.com Email: remel@remel.com

Local/International Phone: (913) 888-0939 International Fax: (913) 895-4128