

Hunt Broth (Campylobacter Enrichment Broth)



Medium used for the isolation and cultivation of Campylobacter spp. from foods and clinical samples.

*Equally use with MFDS (MB-H1131K), Campylobacter Enrichment Broth (MB-C1131) and QIA (MB-C1131Q).

• CONTENTS (Liter)

Beef Extract	10.0 g
Peptone	10.0 g
Sodium Chloride	5.0 g
Yeast Extract	6.0 g
Ferrous Sulfate	0.25 g
Sodium Metabisulfate	0.25 g
Sodium Pyruvate	0.25 g
Final pH = 7.5 ± 0.2 at 25°C	

• PROCEDURE

Suspend 31.75 G of powder in 950 mL 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. Aseptically add 50 mL of Horse Blood Lysed (MB-H1885) and 2 vials of Hunt supplement (A) (MB-H1899) or 2 vials of Hunt supplement (B) (MB-H1898) or 2 vials of Campylobacter C.T.V.N. supplement (MB-C1838). Mix well. Pour into tubes.

Hunt supplement (A)

1 vial contents (each vial is sufficient for 500 mL of medium)

Trimethoprim Lactate	0.0075 g
Sodium Cefoperazone	0.016 g
Vancomycin	0.005 g
Amphotericin B	0.001 g

Hunt supplement (B)

1 vial contents (each vial is sufficient for 500 mL of medium)

Trimethoprim Lactate	0.0075 g
Sodium Cefoperazone	0.016 g
Vancomycin	0.005 g
Rifampicin	0.0025 g

Campylobacter C.T.V.N. supplement

1 vial contents (each vial is sufficient for 500 mL of medium)

Cefoperazone	0.006 g
Trimethoprim	0.0025 g
Vancomycin	0.002 g
Nystatin	0.02 g

• INTERPRETATION

Hunt Broth (Campylobacter Enrichment Broth) is a medium used for the isolation and cultivation of Campylobacter spp. from foods and clinical samples. Beef extract, peptone and yeast extract provide nitrogen, carbon, amino acids, and vitamins. Sodium chloride maintains the osmotic balance of the medium. Ferrous sulfate promotes the growth of Campylobacter spp. Sodium metabisulfate and sodium pyruvate are used for the enumeration of Campylobacter spp. Trimethoprim, cefoperazone and rifampicin inhibit Gram-negative enteric bacilli and some Gram-positive microorganisms. Vancomycin inhibits Gram-positive organisms. Amphotericin B and Nystatin suppress fungi.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Incubate at $36 \pm 1^\circ\text{C}$ for 4 - 5 hours under microaerobic conditions. And then incubate at $42 \pm 1^\circ\text{C}$ for 24 - 48 hours under microaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: slightly opalescent

Color: reddish-dark brown

Incubation conditions: first set : $36 \pm 1^\circ\text{C}$ for 4 - 5 hours under microaerobic condition

second set : $42 \pm 1^\circ\text{C}$ for 24 - 48 hours under microaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Campylobacter jejuni</i>	33291	50-100	good
<i>Escherichia coli</i>	25922	$\geq 10^3$	inhibited
<i>Enterococcus faecalis</i>	29212	$\geq 10^3$	inhibited
<i>Staphylococcus aureus</i>	25923	$\geq 10^3$	inhibited
<i>Aspergillus niger</i>	16404	heavy	inhibited

• 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. Store prepared medium at $2 - 8^\circ\text{C}$.

• REFERENCES

1. Bolton, F.J., D.N. Hutchinson, and D. Coates (1984) J. Clin. Microbiol. 19:169-171.
2. MAFF Validated methods for the analysis of foodstuffs. J. Assoc. Publ. Analysts (1993) 29: 253-262.
3. Refer to the MFDS and QIA.

• PACKAGE

Cat. No : MB-H1131 Hunt Broth (Campylobacter Enrichment Broth)	500 G
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