

## Hunt Broth - Instructions for Use

### *Intended Use*

BACGro™ Hunt Broth, when prepared as directed, is intended for use as a medium for the isolation of *Campylobacter spp.* from dairy and food goods. Hunt Broth is not intended for use in diagnosis, treatment, or prevention of disease in humans.

### *Product Summary*

*Campylobacter spp.* are highly infectious bacteria that colonize the digestive tract of animals. Consumption of food and water contaminated with *Campylobacter spp.* can lead to enteric illnesses that may progress to cause pneumonia, meningitis, Guillain-Barre Syndrome, and miscarriages in pregnant women.

Beef extract and meat peptone provide essential amino acids, nitrogen, and nutrients required for growth. Yeast extract provides B-complex vitamins and acts as a growth enhancement. Sodium chloride aids in maintaining osmotic balance. Antibiotic supplements act as selective agents for the growth of *Campylobacter*. Lysed horse blood offers growth enhancement.

### *Formulation\* (per Liter)*

Beef Extract	10.0 g
Meat Peptone	10.0 g
Yeast Extract	6.0 g
Sodium Chloride	5.0 g
Total	31.0 g/L

\*Formula may be supplemented and/or adjusted as required to meet performance criteria

### *Directions*

1. Add 31 g of Hunt Broth Base powder to 950mL of deionized water.
2. Stir to dissolve completely.
3. Autoclave at 121 degrees Celsius for 15 minutes.
4. Cool prior to supplementation.
5. Aseptically add 2 vials of FBP-VT (SUP5900)
6. Aseptically add 2 vials of Cefoperazone (SUP7800)
7. Aseptically add 2 mL of Amphotericin B (SUP7750)
8. Aseptically add 50mL Lysed Horse Blood (SUP9300)
9. Gently mix before use.

## Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

## Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BACGro™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Light beige, homogenous, free flowing powder, free of debris

Appearance (prepared): Clear, amber, with no precipitate or debris

pH (prepared): 7.3 – 7.7 at 25°C

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	
<i>C. jejuni</i> (ATCC® 33291)	≤100 CFU	22 – 26 hr.	42° C	Microaerophilic	Growth
<i>C. coli</i> (ATCC® 33559)	≤100 CFU	22 – 26 hr.	42° C	Microaerophilic	Growth
<i>E. coli</i> (ATCC® 8739)	>10 <sup>4</sup> CFU	22 – 26 hr.	42° C	Microaerophilic	Inhibition
<i>C. albicans</i> (ATCC® 10231)	>10 <sup>4</sup> CFU	22 – 26 hr.	42° C	Microaerophilic	Inhibition
<i>E. faecalis</i> (ATCC® 29212)	>10 <sup>4</sup> CFU	22 – 26 hr.	42° C	Microaerophilic	Inhibition
<i>P. aeruginosa</i> (ATCC® 9027)	>10 <sup>4</sup> CFU	22 – 26 hr.	42° C	Microaerophilic	Inhibition
<i>P. mirabilis</i> (ATCC® 12453)	>10 <sup>4</sup> CFU	22 – 26 hr.	42° C	Microaerophilic	Inhibition

**NOTE:** Per USDA MLG QC protocols, 30mL of fully supplemented Hunt Broth should be mixed 1:1 with 30mL buffered peptone water prior to inoculation.

## ***Limitations of the Procedure***

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some strains may be encountered that grow poorly in this medium. Further testing is required for the identification and confirmation of *Campylobacter*.

## ***Storage and Expiration***

BACGro™ Hunt Broth Base should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

BACGro™ prepared Hunt Broth Base should be stored 2 – 8 degrees Celsius for no more than 4 weeks.

BACGro™ fully supplemented Hunt Broth should be stored 2 – 8 degrees Celsius for no more than 1 week.

## ***Catalog Numbers***

DCM5905 – Hunt Broth Base, 5kg

SUP9300 – Lysed Horse Blood

SUP7750 – Amphotericin B supplement

SUP7800 – Cefoperazone supplement

SUP5900 – FBP-VT supplement

Revision History:

Revision	Description	Effective Date
02	Updated inoculum of inhibited organisms from ">1,000 CFU" to ">10 <sup>4</sup> CFU" to standardize inhibition testing.	13-MAR-2024
01	Document creation	18-MAY-2022