**Half-Fraser Broth Base**

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| **Product No.** | **Product Category** | **Specification** |
| HCM197 | Dehydrated Culture Medium | 500g /bottle |

**Intended Use**

For the isolation of *Listeria spp.* from food and environmental specimens.

**Principle and Interpretation**

Tryptone, proteose peptone, meat extract, yeast paste powder provide nitrogen sources, vitamins, amino acids, and growth factors; sodium chloride can maintain a balanced osmotic pressure; sodium dihydrogen phosphate and potassium dihydrogen phosphate as buffering agents; aesculin are fermentable sugars; lithium chloride and other antibiotics can inhibit Gram negative bacteria and most Gram positive bacteria.

**Formulation**

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| **Ingredients** | **/liter** |
| Enzymatic Digest of Animal Tissues | 5.0g |
| Enzymatic Digest of Casein | 5.0g |
| Meat extract | 5.0g |
| Yeast extract | 5.0g |
| Sodium chloride | 20.0g |
| Disodium hydrogen phosphate dihydrate | 12.0g |
| Potassium dihydrogen phosphate | 1.35g |
| Aesculin | 1.0g |
| Lithium chloride | 3.0g |
| pH7.2±0.2 at 25°C | |

**Preparation**

Dissolve 57.4g in 1 litre of distilled water. Mix well and distribute into final containers. Sterilize by autoclaving at 121°C for 15 minutes. Then cool to 50°C，and add one Supplement(SR0120) per 225mL of base to prepare Half-Fraser Broth.

**Quality Control**

Cultural characteristics observed after incubation at 29-31°C for 22~26 hours

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| **Quality control strains** | **Growth** | **Characteristics** |
| *Listeria monocytogenes* ATCC19115 | >20 cfu On PALCAM | Gray to black colony count with black halo |
| *Escherichia coli* ATCC25922 | < 100 colonies on TSA | Inhibition |
| *Enterococcus faecalis* ATCC29212 |

**Storage and Shelf Life**

2-30℃，Keep container tightly closed, avoid direct sunlight.

Use before expiry date on the label.

**Precautions**

1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort

2. Keep container tightly closed after using to prevent clumping.

**Waste Disposal**

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

**Revision**

On June 14, 2024

**References**

ISO11290-1-2017