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TECHNICAL SHEET

| B1208 | Listeria Lecithinase Agar Base |
|---------------------|--------------------------------|
| Formula | |
| Ingredients: | gms/lit. |
| Meat brain infusion | n powder 12.5 |
| BHI powder | 5.0 |
| Proteose peptone | 10.0 |
| Dextrose | 2.0 |
| Sodium chloride | 5.0 |
| Disodium phospha | te 2.5 |
| Charcoal activated | 2.0 |
| Agar | 15.0 |
| Final pH (at 25°C) | : 7.2 <u>+</u> 0.2 |

Directions:

Suspend 54 gms. in 950 ml distilled water. Heat to boiling to dissolve the medium. Sterilize by autoclaving at (121°C) for 15 minutes. Cool to 50°C and add 50 ml concentrated Egg Yolk Emulsion(BF003).If desired, selectively of the medium can be enhanced by aseptically adding rehydrated contents of one vial of Fraser Enrichment Supplement (BF055).Mix well and pour into plates.

Principle:

Listeria Lecithinase Agar Base is used for identification of Listeria monocytogenes based on induction of lecithinase activity. Differentiation between L.monocytogenes and other Listeria species is often difficult because of similar morphological and biochemical properties. Listeria monocytogenes strains show specific induction of lecithinase activity in presence of activated charcoal and Egg Yolk Emulsion (BF003). The activated charcoal provides a black background that facilitates easy observation of opaque zone around lecithinase positive colonies. Lecithinase activity in Listeria monocytogenes is indicated by a opaque halo around the colonies. Fraser Enrichment Supplement (BF055) when added, nalidixic acid and acriflavin inhibits the growth of gram-negative and gram-positive organisms respectively except Listeria species. This medium contains calf brain infusion, beef heart infusion and proteose peptone which provides essential nutrients like carbon and nitrogenous compounds including vitamins, aminoacids and trace ingredients. Phosphate provides buffering action to the medium while sodium chloride maintains osmotic equilibrium.

| QC Tests – (I)Dehydrated Medium | OC Tosts - (T)Debydrated Medium | | | | | | |
|---|---------------------------------|-----------------------------------|--|--|--|--|--|
| Colour : | | to black | | | | | |
| Appearance : | | Homogeneous Free Flowing powder | | | | | |
| (II)Rehydrated medium | | | · J - · · · | | | | |
| | | 7.2 ± 0.2 | | | | | |
| | | Black | | | | | |
| Clarity (post autoclaving/heating) : | | Opaque gel forms in petri plates. | | | | | |
| (III)Q.C. Test Microbiological | | | | | | | |
| Cultural characteristics observed with added Egg yolk emulsion (BF003) and Fraser | | | | | | | |
| Enrichment Supplement(BF055)after an incubation at 35-37°C for 24-36 hours. | | | | | | | |
| MICROORGANISM (ATCC) | | GROWTH | LECITHINASE ACTIVITY | | | | |
| Listeria innocua (33090) | | luxuriant | Negative, no opaque zone around the colony | | | | |
| Escherichia coli (25922) | | Inhibited | - | | | | |
| Listeria grayi(19120) | | luxuriant | Negative, no opaque zone around the colony | | | | |
| Listeria monocytogenes(19112) | | Luxuriant | Positive, opaque zone around the colony | | | | |
| Listeria ivanovii(19119) | | Luxuriant | Positive, opaque zone around the colony | | | | |

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| Listeria seelige | Listeria seeligeri(35967) | | xuriant | Negative, no opaque the colony | zone around | | |
|---------------------|--|--------------------------------|------------------|--|---------------|--|--|
| L.welshimeri(43549) | | Lu | xuriant | Negative, no opaque the colony | e zone around | | |
| Precautions : | For Laboratory Use. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | | | | | |
| Limitations : | 1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium. | | | | | | |
| Use : | For identification of Listeria monocytogens based on induction of lecithinase activity in presence of activated charcoal. | | | | | | |
| Storage : | Dehydrated medium- below 30°C Prepared medium below 8°C. | | | | | | |
| Packing: | 500 gm. bottle | | | | | | |
| Product profile: | Reconstitution | Quantity on Preparation (500g) | pH (25°C | Supplement | Sterilization | | |
| B1208 | 54.0 g/l | 9.25 | 7.2 <u>+</u> 0.2 | Egg Yolk Emulsion (BF003)andFraser Enrichment Supplement (BF055) | | | |

Refer disclaimer Overleaf

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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