Lactalbumin Hydrolysate, TC

Being rich in essential amino acids it can be successfully used to supplement Tissue Culture Media. It can be used as a substrate for many microorganisms.

**Principle And Interpretation**

Lactalbumin Hydrolysate is prepared by the pancreatic digest of milk protein. This product is specially manufactured under controlled conditions to meet tissue culture growth requirements.

**Quality Control**

**Appearance**
Off white to light yellow Homogenous Free flowing powder, having Characteristic odour.

**Solubility**
Freely soluble in distilled/purified water, insoluble in alcohol, chloroform and ether.

**Clarity**
1% w/v aqueous solution is clear without any haziness after autoclaving at 15 lbs pressure (121°C) for 15 minutes.

**Reaction**
Reaction of 2% w/v aqueous solution at 25°C.

**pH**
6.20- 7.20

**Microbial Load:**

**Total aerobic microbial count (cfu/gm)**
By plate method when incubated at 30-35°C for not less than 3 days.

Bacterial Count : <= 2000 CFU/gram

**Total Yeast and mould count (cfu/gm)**
By plate method when incubated at 20-25°C for not less than 5 days.

Yeast & mould Count : <= 100 CFU/gram

**Test for Pathogens**
1. E.coli- Negative in 10 gms of sample
2. Salmonella species- Negative in 10 gms of sample
3. Pseudomonas aeruginosa- Negative in 10 gms of sample
4. Staphylococcus aureus- Negative in 10 gms of sample
5. C.albicans- Negative in 10 gms of sample
6. Clostridia- Negative in 10 gms of sample

**Indole test**
Tryptophan content: Passes

**Cultural response**
Cultural response observed after an incubation at 35-37°C for 16-24 hours by preparing B12 culture Agar(M035) using Lactalbumin Hydrolysate, TC as an ingredient.

**Toxicity on cell lines**
Negative

**Cell Culture Response**
Positive

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactobacillus leichmannii ATCC 7830</td>
<td>Good-luxuriant</td>
</tr>
<tr>
<td>Lactobacillus casei ATCC 9595</td>
<td>Luxuriant</td>
</tr>
<tr>
<td>Lactobacillus plantarum ATCC 8014</td>
<td>Good -</td>
</tr>
<tr>
<td>Lactobacillus viridescens ATCC 12706</td>
<td>Luxuriant</td>
</tr>
</tbody>
</table>

**Please refer disclaimer Overleaf.**
Chemical Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 12.0%</td>
</tr>
<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 4.0%</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>&lt;= 5.0%</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>&lt;= 5.0%</td>
</tr>
<tr>
<td>Residue on ignition</td>
<td>&lt;= 7.50%</td>
</tr>
</tbody>
</table>

Storage and Shelf Life

Store below 30°C. Use before expiry date on the label.