Eugonic LT 100 Broth

Intended use

Recommended for the cultivation of fastidious organisms.

Composition

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>GmGms/litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptone</td>
<td>15.000</td>
</tr>
<tr>
<td>Soya peptone</td>
<td>5.000</td>
</tr>
<tr>
<td>Glucose (Dextrose)</td>
<td>5.500</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>4.000</td>
</tr>
<tr>
<td>Sodium sulphite</td>
<td>0.200</td>
</tr>
<tr>
<td>L-Cystine</td>
<td>0.700</td>
</tr>
<tr>
<td>Egg lecithin</td>
<td>1.000</td>
</tr>
<tr>
<td>Triton X-100</td>
<td>1.000</td>
</tr>
<tr>
<td>Polysorbate 80 (Tween 80)</td>
<td>5.000</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.0±0.2</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters

Directions

Label the ready to use LQ208CCCL bottle. Inoculate the sample and Incubate at specified temperature and time.

Principle and Interpretation

Eugonic LT 100 Medium Base was developed by Pelczar and Vera (1) for cultivation of fastidious organisms like *Brucella*. Eugon media were developed to obtain eugonic (luxuriant) growth of fastidious microorganisms like *Brucella* which are otherwise difficult to cultivate (3). The unenriched medium supports rapid growth of lactobacilli associated with cured meat products, dairy products and other foods. Eugonic media is quite similar to Tryptone Soya Agar (M290) but more bacterial propagation is expected on Eugonic media. Organisms like *Bordetella* and *Neisseria* form minute colonies on Tryptone Soya Agar (M290). They may become large on Eugon Media because large amount of sulfur and carbon sources have been added in addition to the Tryptone Soya Agar (M290) formula.

Tryptone and soya peptone provide the nitrogen, carbon compounds, vitamins and amino acids, which supports the growth of fastidious microbial species. The high concentration of glucose is the energy source for rapid growth of bacteria. L-Cystine and sodium sulphite are added to stimulate growth. Sodium chloride maintains the osmotic balance of the media. The high carbohydrate content along with high sulfur (cystine) content improves growth with chromogenicity (2). Lecithin and polysorbate 80 in Eugonic LT 100 Broth neutralize antimicrobial agents hence this medium can be used as a neutralizing diluent.

Type of specimen

Clinical samples- Blood, urine, Nasopharyngeal aspirates or swabs; Food and dairy samples

Specimen Collection and Handling

For clinical isolate, follow appropriate techniques for sample collection and processing as per guidelines (3,4).
For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (7,8,9).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Please refer disclaimer Overleaf.
In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

**Limitations**

1. Certain fastidious organisms may not grow due to nutritional variation.
2. Further biochemical and serological tests must be carried out for confirmation.

**Performance and Evaluation**

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

**Quality Control**

**Appearance**
Sterile clear Eugonic LT 100 Broth in bottle.

**Colour**
Yellow coloured clear solution

**Quantity of Medium**
250 ml of medium in glass bottle.

pH - 6.80-7.20

**Sterility Test** Passes
release criteria

**Cultural Response**:
Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours (fungal cultures incubated at 25-30°C for 2-7 days).

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bacillus pumilus</em> ATCC 14884</td>
<td>50-100</td>
<td>good w/ 0.1% Starch</td>
</tr>
<tr>
<td><em>Brucella abortus</em> ATCC 4315</td>
<td>50-100</td>
<td>good (under 3-5% CO2)</td>
</tr>
<tr>
<td><em>Candida albicans</em> ATCC 26790</td>
<td>50-100</td>
<td>good</td>
</tr>
<tr>
<td><em>Lactobacillus fermentum</em> ATCC 9338</td>
<td>50-100</td>
<td>good</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em> ATCC 6303</td>
<td>50-100</td>
<td>good-luxuriant (under 3-5% CO2)</td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em> ATCC 19615</td>
<td>50-100</td>
<td>good-luxuriant (under 3-5% CO2)</td>
</tr>
<tr>
<td><em>Neisseria meningitidis</em> ATCC 13090</td>
<td>50-100</td>
<td>good</td>
</tr>
</tbody>
</table>

**Storage and Shelf Life**
Store between 15-25°C. Use before expiry date on the label.
Product performance is best if used within stated expiry period.

Please refer disclaimer Overleaf.
Disposal
User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference
6. Pelczar and Vera J., 1949, Milk Plant Monthly 38:30

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