EUGONIC BROTH (MODIFIED)

INTENDED USE
Remel Eugonic Broth (Modified) is a liquid medium recommended for use in qualitative procedures for the cultivation of a wide variety of microorganisms including Neisseria, Haemophilus, and anaerobic bacteria.

SUMMARY AND EXPLANATION
This medium was developed by Vera to obtain Eugonic (luxuriant) growth of fastidious organisms, such as Neisseria, Haemophilus, and Brucella. Finegold recommended the addition of maltose, yeast extract, vitamin K, and hemin to aid in the recovery of anaerobes and fastidious organisms from clinical specimens. Campos and Spainhour recommended Eugonic Broth (Modified) for detection of bacteremia in patients from whom only a small amount of blood can be collected, such as pediatric patients.

PRINCIPLE
Casein, meat, and soy peptones supply essential nutrients which support rapid and luxuriant growth of most microorganisms. Dextrose provides a ready source of energy. Maltose and yeast extract stimulate growth of anaerobic bacteria. GCHI Enrichment is a defined supplement which provides V factor (NAD), vitamins, amino acids, coenzymes, dextrose, and ferric ions to promote growth of fastidious microorganisms including Neisseria and Haemophilus. Hemin and vitamin K supply growth factors required by certain anaerobes. A small amount of agar is added to reduce the level of oxygen in the lower portion of the tube and enhance anaerobic conditions.

REAGENTS (CLASSICAL FORMULA)*

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maltose</td>
<td>10.0</td>
</tr>
<tr>
<td>Casein Peptone</td>
<td>8.0</td>
</tr>
<tr>
<td>Meat Peptone</td>
<td>8.0</td>
</tr>
<tr>
<td>Dextrose</td>
<td>5.0</td>
</tr>
<tr>
<td>Soy Peptone</td>
<td>5.0</td>
</tr>
<tr>
<td>Yeast Extract</td>
<td>5.0</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>4.0</td>
</tr>
<tr>
<td>L-Cystine</td>
<td>0.2</td>
</tr>
<tr>
<td>Sodium Sulfite</td>
<td>0.2</td>
</tr>
<tr>
<td>Hemin</td>
<td>5.0 mg</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>GCHI Enrichment</td>
<td>20.0 ml</td>
</tr>
<tr>
<td>Agar</td>
<td>0.15 g</td>
</tr>
<tr>
<td>Demineralized Water</td>
<td>1000.0 ml</td>
</tr>
</tbody>
</table>

pH 7.0 ± 0.2 @ 25°C

*Adjusted as required to meet performance standards.

PROCEDURE
1. Inoculate Eugonic Broth (Modified) directly with the clinical specimen as soon as possible after it is received in the laboratory.
2. Incubate in the appropriate atmospheric condition at 33-37°C for a minimum of 72 hours.
3. Observe daily for growth (turbidity).
4. If growth occurs, Gram stain and subculture to appropriate media.
5. Identify isolates following established laboratory procedures. Consult appropriate references for further instructions.

QUALITY CONTROL
All lot numbers of Eugonic Broth (Modified) have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, patient results should not be reported.

CONTROL
Bacteroides fragilis ATCC® 25285
Clostridium perfringens ATCC® 13124
Escherichia coli ATCC® 25922
Haemophilus influenzae ATCC® 10211
Neisseria gonorrhoeae ATCC® 43069
Staphylococcus aureus ATCC® 25923

INCUBATION
Anaerobic, 18-24 h @ 33-37°C
Anaerobic, 18-24 h @ 33-37°C
Aerobic, 18-24 h @ 33-37°C
CO2, 18-24 h @ 33-37°C
CO2, 18-24 h @ 33-37°C
Aerobic, 18-24 h @ 33-37°C

RESULTS
Growth
Growth
Growth
Growth
Growth
Growth

LIMITATIONS
1. Some precipitation may be evident in this medium but it will not affect the performance of the product.
BIBLIOGRAPHY

Refer to the front of Remel Technical Manual of Microbiological Media for General Information regarding precautions, product storage and deterioration, sample collection, storage and transportation, materials required, quality control, and limitations.

ATCC® is a registered trademark of American Type Culture Collection.
IFU 7104, Revised June 1, 2009

Printed in U.S.A.