

Product Data Sheet

THIOGLYCOLLATE BROTH W/ LIVER EXTRACT (B.Q.VACCINE MEDIUM)

Product No. GB-DCM-00062-1A

INTENDED USE

For mass cultivation of anaerobes for vaccine production.

Product Description

Anaerobic microorganisms have long been known as constituents of the normal bacterial flora of human and animal organisms. Both their pathogenic significance in medicine and their important role in food hygiene have, however, long been underestimated. During the past few years the importance of anaerobic microorganisms as pathogenic agents responsible for infectious diseases and the role they play in the microbial spoilage of food and water have been better appreciated. Extremely different spectra of anaerobic organisms are of importance for the examination of food and in the clinical microbiology. B.Q. Vaccine Medium (Thioglycollate Broth with Liver Extract) is modification of original Thioglycollate medium, recommended for the cultivation of anaerobic organisms on large scale. It is a nutritious medium due to the presence of peptic digest of animal tissue, liver tissues and muscle tissues.

Product Specifications

| Ingredients | Gms / Ltr |
|--------------------------------|------------------|
| Peptic digest of animal tissue | 10.000 |
| Liver tissues,infusion from | 5.000 |
| Muscle tissues,infusion from | 5.000 |
| Sodium thioglycollate | 1.000 |
| Dipotassium phosphate | 4.000 |
| Sodium chloride | 5.000 |

PRINCIPLE

Peptic digest of animal tissue supply the nitrogenous compounds and growth factors. Liver tissues and muscle tissues provide trace minerals, growth factors and vitamins for the growth of wide variety of organisms. Sodium thioglycollate acts as a reducing agent, which lowers the oxidation-reduction potential of the medium thereby enabling the obligate anaerobes to multiply. Added glucose, act as the source of energy. Dipotassium phosphate and sodium chloride helps in maintaining buffering action and isotonic conditions respectively in the medium.

| Microorganism | ATCC | Inoculum (CFU) | Growth | Incubation Temperature | Incubation Period |
|--------------------------------|-------|----------------|-----------------|------------------------|-------------------|
| <i>Clostridium perfringens</i> | 12924 | 50-100 | Good- luxuriant | 35-37°C | 18-48 Hours |
| <i>Clostridium sporogenes</i> | 11437 | 50-100 | Good- luxuriant | 35-37°C | 18-48 Hours |
| <i>Streptococcus pyogenes</i> | 19615 | 50-100 | Good- luxuriant | 35-37°C | 18-48 Hours |
| <i>Bacillus subtilis</i> | 6633 | 50-100 | Good- luxuriant | 35-37°C | 18-48 Hours |
| <i>Micrococcus luteus</i> | 10240 | 50-100 | Good- luxuriant | 35-37°C | 18-48 Hours |
| <i>Neisseria meningitidis</i> | 13090 | 50-100 | Good- luxuriant | 35-37°C | 18-48 Hours |
| <i>Bacteroides vulgatus</i> | 8482 | 50-100 | Fair-good | 35-37°C | 18-48 Hours |

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

QUALITY CONTROL SPECIFICATIONS:

| | |
|---------------------------------------|---|
| Appearance of Powder: | Cream to yellow homogeneous free flowing powder. |
| Appearance of prepared medium: | Amber coloured, clear to very slightly opalescent solution. |
| pH (at 25°C): | 8.2±0.2 |



INSTRUCTION FOR USE:

- Suspend 30 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add 0.5% sterile glucose solution.
- Mix thoroughly and then dispense as desired.

This product is for research use only.