

B.Q. Vaccine Medium

Intended Use

B.Q. Vaccine Medium is recommended for the cultivation of anaerobic organisms on large scale for vaccine production.

Summary

Anaerobic microorganisms have long been known as constituents of the normal bacterial flora of human and animal organisms. It is a nutritious medium due to the presence of peptic digest of animal tissue, liver tissues and muscle tissues. 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.

Principle

The medium contains peptic digest of animal tissue which 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. Glucose acts as the source of energy. Dipotassium phosphates act as buffer and sodium chloride maintains isotonic conditions in the medium.

Formula*

Ingredients	g/L
Dipotassium Phosphate	4.0
Liver Tissue, Infusion from	250.0
Muscle Tissue, Infusion from	250.0
Peptic Digest of Animal Tissue	10.0
Sodium Chloride	5.0
Sodium Thioglycolate	1.0
Final pH (at 25°C)	8.2 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen

Pharmaceutical sample

Specimen Collection and Handling

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.

The samples must be stored and tested within the permissible time duration.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 30.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely. DO NOT OVERHEAT.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 mins as per validated cycle.
5. Cool to 50°C and aseptically add 10 mL 0.5% sterile glucose solution.

Quality Control

Dehydrated Appearance: Yellow coloured, homogeneous free flowing powder

Prepared Appearance: Light yellow to medium amber coloured, clear solution without any precipitate.

Cultural Response: Cultural characteristics observed after an incubation at 30°C-35°C for 18-48 hours under anaerobic conditions.

Organisms (ATCC)	Growth
<i>Clostridium perfringens</i> (13124)	Good
<i>Clostridium sporogenes</i> (11437)	Good
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good
<i>Bacillus spizizenii</i> (6633)	Good
<i>Clostridium chauvoei</i> (Strain 49)	Good
<i>Bacteroides vulgatus</i> (8482)	Good
<i>Kocuria rhizophila</i> Strain PCI 1001 (9341)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Brewer J. H., 1940, J. Am Med. Assoc., 115, 598.
2. Brewer J. H., 1940, J. Bacteriol. 39:10.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201020220500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
