Thioglycollate Broth w/ HL Extract (B.Q. Vaccine Medium)

M462

Intended Use:

Recommended for cultivation of anaerobic organisms on large scale for vaccine production.

Composition**

Ingredients	g / L
Peptone	10.000
HL infusion from 250 g #	5.000
HMM infusion from 250 g##	5.000
Sodium thioglycollate	1.000
Dipotassium hydrogen phosphate	4.000
Sodium chloride	5.000
Final pH (at 25°C)	8.2±0.2

**Formula adjusted, standardized to suit performance parameters
Equivalent to Liver tissues,infusion from
Equivalent to Muscle tissues,infusion from

Directions

Suspend 30.0 grams in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add 0.5% sterile glucose solution. Mix thoroughly and dispense in sterile tubes or flasks as desired.

Principle And Interpretation

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. Thioglycollate Broth w/ HL Extract (B.Q. Vaccine Medium) is modification of original Thioglycollate medium (1,2), recommended for the cultivation of anaerobic organisms on large scale. It is a nutritious medium due to the presence of Peptone, HL infusion and HMM infusion. Peptone supply the nitrogenous compounds and growth factors. HL infusion and HMM infusion 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.

Type of specimen

Isolated Microorganisms from Clinical samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional 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. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.

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

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Amber coloured, clear to very slightly opalescent solution

Reaction

Reaction of 3.0% w/v aqueous solution at 25°C. pH : 8.2±0.2

pH

8.00-8.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth
Clostridium perfringens ATCC 12924	50-100	good-luxuriant
Clostridium sporogenes ATCC 11437	50-100	good-luxuriant
Streptococcus pyogenes ATCC 19615	50-100	good-luxuriant
****Bacillus spizizenii* ATCC 6633 (00003*)	50-100	good-luxuriant
$ Kokuria rhizophila ATCC 10240	50-100	good-luxuriant
Neisseria meningitidis ATCC 13090	50-100	good-luxuriant
# Phocaeicola vulgatus ATCC 8482	50-100	fair-good

Key : *Corresponding WDCM numbers, **Formerly known as *Bacillus subtilis* subsp. *spizizenii,*

Formerly known as *Bacteroides vulgatus,* $ Formerly known as *Micrococcus luteus.*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Product performance is best if used within stated expiry period.

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

1. Brewer J. H., 1940, J. Am Med. Assoc., 115, 598.
2. Brewer J. H., 1940, J. Bacteriol. 39:10.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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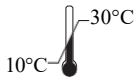
IVD ***In vitro* diagnostic medical device**



Storage temperature

EC REP

CEpartner4U, Esdoornlaan 13,
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CE Marking

Do not use if package is damaged

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