Technical Information

Soyabean MiVeg Broth Base

Product Code :VM2286

Application:- Soyabean MiVeg Broth Base with supplement is recommended for enrichment and isolation of *Escherichia coli* 015:H7 from food samples.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	17.0
Papaic digest of soyabean meal	3.0
Synthetic detergent No. I	1.12
Dextrose	2.5
Sodium chloride	5.0
Dipotassium hydrogen phosphate	4.0
Final pH (at 25°C)	7.3 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Soyabean MiVeg Broth Base is prepared by adding MiVeg hydrolysate in place of Casein enzymic hydrolysate thereby making the medium BSE/TSE risks free. Soyabean MiVeg Broth Base is the modification of Soyabean Bile Broth which is formulated as recommended by FDA (1) for the enrichment and isolation of *Escherichia coli* 015:H7. MiVeg hydrolysate, Papaic digest of soyabean meal supplies all the essential nitrogenous and carbonaceous growth nutrients. Dextrose serve as carbon and energy source. Synthetic detergent No. I inhibits gram-positive bacteria. Sodium chloride maintains osmotic equilibrium while phosphate buffers the medium. Novobiocin supplementation imparts selectivity to the medium. Whenever low levels of *Escherichia coli* 0157:H7 are suspected, the food is enriched in Soyabean MiVeg Broth Base and further plated onto selective medium such as MacConkey Sorbitol MiVeg Agar (VM1298) for isolation and identification. 25 gm of food sample is blended in 224 ml Soyabean MiVeg Broth Base and incubate on shaker (about 100 rpm) for 18-24 hours at 37°C. Prepare dilution of the enrichment culture with phosphate buffer and spread 0.1 ml of each dilution on MacConkey Sorbitol MiVeg Agar (VM1298) Plates and incubate at 43°C for 24 hours.

Methodology

Suspend 16.31 grams of powder media in 500 ml distilled water. Mix thoroughly and 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 and aseptically add 2 vials of rehydrated contents of Novobiocin Supplement (MS2096). Mix well before dispensing.

Quality Control

Physical Appearance

Yellow coloured, may have slightly greenish tinge,homogeneous, free flowing powder.

Colour and Clarity of prepared medium

Light amber coloured clear solution without any precipitate.

Reaction

Reaction of 3.26% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

pH Range

7.1-7.5

Cultural Response/Characteristics

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

Organisms (ATCC)	Inoculum (CFU)	Recovery*
Escherichia coli (25922)	10^2-10^3	good
Escherichia coli 015:H7	10^2-10^3	luxuriant
Staphylococcus aureus (25923)	10^2-10^3	none
Enterococcus faecalis (29212)	10^2-10^3	none

Key: * = On MacConkey Sorbitol MiVeg Agar (VM1298)

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 day.

Further Reading

1. Bacteriological Analytical Manual, 1995, 8th ed., Food and Drug Administration, AOAC International, Gaithersburg, USA.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for in fingement of any patents. Do not use the products if it fails to meet specificatons for identity and performens parameters.