

D/E NEUTRALIZING BROTH SWAB
Presentation

Conical bottom plastic tube with screw cap and leak-proof rings containing 10ml and cap with sterile flocced nylon swab.

Sterilization method

Moist heat.

Application

The D/E (Dey-Engley) Neutralizing Broth is used in environmental samples where the neutralization of antiseptics and disinfectants is important to determine their bactericidal or bacteriostatic activity.

Principle

The D/E Neutralizing broth was developed to neutralize a broad spectrum of disinfectants and antimicrobial preservatives, including quaternary ammonium compounds, phenolics, iodine, chlorine-containing preparations, mercury, formaldehyde, and glutaraldehyde. Sodium thioglycollate present in the medium neutralizes mercury. Sodium thiosulfate neutralizes iodine and chlorine. Sodium bisulfite neutralizes formaldehyde and glutaraldehyde. Lecithin neutralizes quaternary ammonium compounds. Polysorbate 80 neutralizes phenols, hexachlorophenes, formalin, and, with lecithin, neutralizes ethanol. Bromocresol purple is used as a colorimetric indicator to demonstrate acid production resulting from dextrose fermentation.

How to use

Perform sample collection using the swab according to the laboratory's methodology. After collection, send the sample to the laboratory. Incubate at the time and temperature specified by the laboratory.

Quality Control

Test	Result
Sterility	Absence of microbial growth
<i>Salmonella enterica</i> ATCC 14028	Good growth with a change in color from purple-blue to yellow
<i>Escherichia coli</i> ATCC 25922	Good growth with a change in color from purple-blue to yellow
<i>Bacillus subtilis</i> ATCC 6633	Good growth with a change in color from purple-blue to yellow
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good growth with a change in color from purple-blue to yellow
<i>Staphylococcus aureus</i> ATCC 25923	Good growth with a change in color from purple-blue to yellow
Appearance	Liquid medium, opalescent, purple-blue, may contain sediment
pH at 25°C	7.6 ± 0.2

Results interpretation

Microbial growth is evidenced by a color change in the medium, from purple to yellow, or by the formation of a film. If growth is observed, perform microscopic analysis, subculture on selective media, and biochemical tests to identify isolated genera and species, if necessary.

Precautions and special care

Product intended for *in vitro* diagnostic use only.
Restricted for use by professionals. Do not inhale or ingest.
Do not use the product beyond the expiration date, with signs of contamination, or if it has changed color. In the presence of contamination, the product should be immediately discarded.
Do not use the product if the packaging is damaged or tampered with.

Storage

Store between 2-8°C in a dry place and protect from light.

Shelf-life

90 days from the date of manufacture.

Disposal of the product

After use, the product must be handled at the generating unit before environmentally appropriate final disposal, in accordance with official regulations.

Quality Guarantee

bioBoaVista guarantees the quality of its products as long as they are used according to their respective instructions and in accordance with national and international references. bioBoaVista does not take responsibility for the use of its products for purposes other than those described and approved by the company. All clinical diagnoses should be analyzed in conjunction with clinical evidence and not solely based on laboratory results.

References

1. Becton, Dickinson and Company. Difco & BBL Manual. Manual of Microbiological Culture Media, 2nd ed., 2009.
2. ISO 6579-1:2017. Microbiology of food chain – Horizontal method for the detection, enumeration and serotyping of *Salmonella*. Part 1: Detection of *Salmonella* spp.
3. ISO 11133:2014. Microbiology of food, animal feed and water - Preparation, production, storage and performance testing of culture media.
4. Manual de Métodos de Análise Microbiológica de Alimentos, Livraria Varela, 3ª ed., 2007.
5. Merck Microbiology Manual. 12th ed.