DEV Nutrient Agar (i23485)

For determining the total microbial count in water according to the German Standard Methods, the German Drinking Water Regulations and the German regulation for food examination.

Industry: Dairy Products / Water

Principles & Uses

DEV Nutrient Agar, a versatile nonselective medium, is endorsed by German and American regulatory standards for microbial cultivation. With enhanced nutritional content compared to regular Nutrient Agar, it supports the growth of a diverse range of microorganisms. Comprising peptone from meat and beef extract, it offers essential elements like nitrogen, vitamins, minerals, and amino acids. Sodium chloride maintains osmotic balance, and agar solidifies the medium. According to German testing standards and American Public Health Association (APHA) recommendations, this medium is well-suited for bacteriological examination of water and milk. It serves as a foundational base for enrichment with blood or other supplements, facilitating the cultivation of fastidious microorganisms. Whether using the surface spread technique or pour plate method, DEV Nutrient Agar allows for the enumeration of microorganisms in tested samples. Incubation at specified temperatures provides an observation window of 44 ± 4 hours for bacterial growth assessment.

Composition (gr/L)

Peptone from Meat 10 g, Meat Extract 10 g, Sodium Chloride 5 g, Agar 18 g.

Final pH at 25°C 7.3 ± 0.2

Preparation from dehydrated Powder

Suspend 43 g in 1 liter of distilled water. Sterilize by autoclaving at 121°C for 15 minutes.

Quality Control

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Prepared Appearance: Light amber, clear.

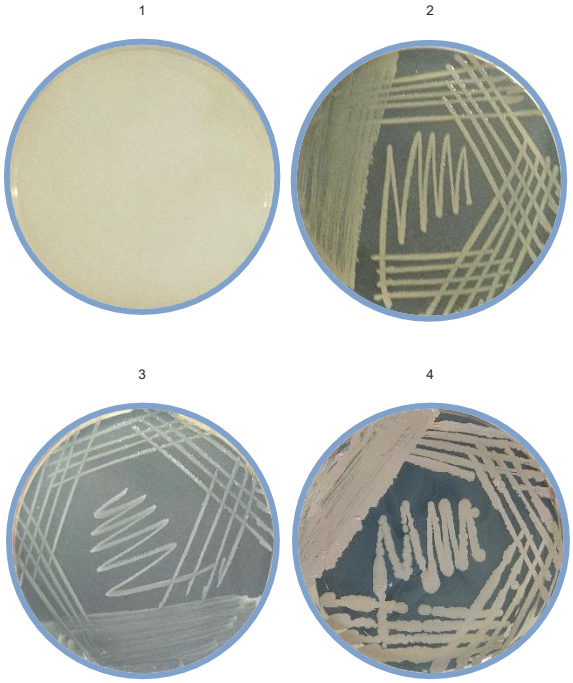
Reaction of 4.3% Solution at 25°C: pH 7.3 ± 0.2

Cultural Response

Inoculate and incubate at 35 ± 2°C for 18-24 hours.

Organism (ATCC*)	Recovery Rate%
Enterococcus faecalis (11700)	≥ 70
Escherichia coli (25922)	≥ 70
Bacillus subtilis (6633)	≥ 70
Serratia marcescens (14756)	≥ 70
Pseudomonas aeruginosa (27853)	≥ 70

*ATCC is a registered trade mark of the American Type Culture Collection.



1: Prepared Culture Media. 2: *Escherichia coli*. 3: *Enterococcus faecalis*. 4: *Bacillus subtilis*.

The background of cultured plates has been darkened for better visibility of colonies.

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.