DC MEDIUM

INTENDED USE

DC Medium is a selective medium used for the detection of Escherichia coli in samples using the membrane filtration method in a laboratory setting. DC Medium is not intended for use in the diagnosis of disease or other conditions in humans.

PRINCIPLE

Tryptose and Proteose Peptone provide nitrogen, carbon, and amino acids in DC Medium. Yeast Extract supplies vitamins and minerals. Sodium Chloride maintains the osmotic balance of the medium. Bile Salts is a selective agent against Gram-positive bacteria, particularly bacilli and fecal streptococci. Cefsulodin supplements the medium as a selective agent. Neutral Red is the dye indicator, and Agar is the solidifying agent.

REAGENTS (FORMULA)

Lactose	10.0	g
Tryptose	10.0	g
Yeast Extract	3.0	g
Sodium Chloride	5.0	g
Proteose Peptone	5.0	g
Bile Salts	1.5	g
Neutral Red	0.08	g
Agar	15.0	g
Deionized Water	1000.0	ml

PROCEDURE

1. Roll the membrane filter used to collect the water sample onto the surface of the agar, so as to avoid the formation of air bubbles between the filter and the agar surface.

2. Incubate at 35.0 ± 0.2°C for 18-24 hours.

EXPECTED RESULTS

Colonies of *E. coli* will be pink with bile precipitate.

QUALITY CONTROL

All lot numbers have been tested and have been found to be acceptable. Customers can test products using the following quality control organisms. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, sample results should not be reported.

Organisms	Incubation	Results
Escherichia coli ATCC 25922	35.0 ± 0.2°C for 18-24 hours	Growth; Pink Colonies with Bile Precipitate
Enterococcus faecalis ATCC 29212	35.0 ± 0.2°C for 18-24 hours	Complete Inhibition
Salmonella typhimurium ATCC 14028	35.0 ± 0.2°C for 18-24 hours	Growth; Colorless/Translucent Colonies

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BIBLIOGRAPHY

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