

TM 1802 – DIFFERENTIAL REINFORCED CLOSTRIDIAL AGAR

INTENDED USE

For enumeration and cultivation of Clostridia from water.

PRODUCT SUMMARY AND EXPLANATION

Attenborough and Scarr employed Differential Reinforced Clostridial Agar in conjunction with membrane filter for the count of Clostridium thermosaccharolyticum in sugar. This medium is also frequently employed for the investigation of intestinal flora, with added blood. It is also used for the total and Lactobacillus count of human and animal faeces and for determination of Bacteroides.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	5.000
Peptic digest of animal tissue	5.000
Beef extract	8.000
Yeast extract	1.000
Starch	1.000
Sodium acetate	5.000
Glucose	1.000
L-Cysteine hydrochloride	0.500
Sodium bisulphite	0.500
Ferric ammonium citrate	0.500
Resazurin	0.002
Agar	15.000

PRINCIPLE

The medium consists of casein enzymic hydrolysate, peptic digest of animal tissue and yeast extract, beef extract, which provide nitrogen source, essential nutrients and growth factors to the organisms. Glucose serves as carbon and energy source. Sodium bisulphite and ferric ammonium citrate forms the indicator system for sulphite reduction, which results in black colour colonies. Resazurin is a redox indicator which helps in detection of anaerobisis, in the medium.

INSTRUCTION FOR USE

- Dissolve 42.5 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS















Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Light pink coloured, clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.1 ± 0.2

INTERPRETATION

Cultural characteristics observed in an anaerobic atmosphere after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Clostridium perfringens	13124	50-100	Good- luxuriant	>=50%	Black	30-35°C	1 Week
Clostridium sporogenes	11437	50-100	Good- luxuriant	>=50%	Black	30-35°C	1 Week

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

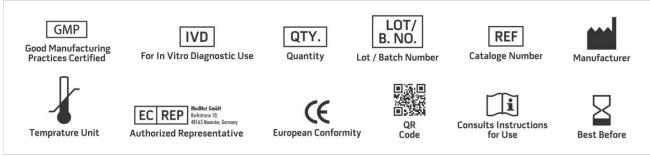
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Attenborough Sheila J. and Scarr M. Pamela, 1957, J. Appl. Bacteriol., 20:460-466.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only
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