

DRCM (Differential Reinforced Clostridial Broth)



Medium used for the cultivation and identification of spore forming sulfite reducing anaerobes, especially *Clostridium* spp. by the MPN method.

*Equally use with NIER (MB-R2234N) and MB-R2234.

• CONTENTS (Liter)

Tryptone	5.0 g
Peptone	5.0 g
Beef Extract	8.0 g
Yeast Extract	1.0 g
L-cystein HCl	0.5 g
Soluble Starch	1.0 g
Dextrose	1.0 g
Sodium Acetate	5.0 g
Sodium Bisulfite	0.5 g
Ferric Ammonium Citrate	0.5 g
Resazurin Sodium	0.002 g
Final pH = 7.1 ± 0.2 at 25°C	

• PROCEDURE

Suspend 27.5 G of powder in 1 L of distilled or deionized water or suspend 55.0 G of powder in 1 L of deionized water for double strength. If necessary, adjust pH to 6.8 ± 0.2. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Mix well. Pour into tubes.

• INTERPRETATION

DRCM (Differential Reinforced Clostridial Broth) is a medium used for the cultivation and identification of spore forming sulfite reducing anaerobes, especially *Clostridium* spp. by the MPN method. Tryptone, peptone, beef extract, yeast extract, soluble starch and sodium acetate provide essential nutrients for bacterial metabolism. Dextrose is the fermentable carbohydrate and serves as carbon and energy source. L-cysteine HCl acts as reducing agent. Sodium bisulfite and ferric ammonium citrate are added as indicators. Resazurin sodium is an oxidation-reduction indicator.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 35 ± 0.5°C for 48 ± 3 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free flowing, homogeneous

Color: beige

Prepared medium

Appearance : slightly opalescent

Color: reddish brown

Incubation conditions: 35 ± 0.5°C / 48 ± 3 hours under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth	H ₂ S production
<i>Clostridium perfringens</i>	13124	50-100	good	+ (blackening)
<i>Clostridium sporogenes</i>	11437	50-100	good	+ (blackening)

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. ISO 6461/1 (1986) Water quality - Detection and enumeration of the spores of sulfite-reducing naerobes (clostridia) – Part 1: Method by enrichment in a liquid medium.
2. Gibbs, M.B. & Freame B. (1965). J. Appl. Bact .28: 95-111.
3. European Pharmacopoeia, 3rd ed. 2001 supplement.
4. Refer to the NIER.

• PACKAGE

Cat. No : MB-D2234 DRCM (Differential Reinforced Clostridial Broth)	500 G
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• MICROBIAL CULTURE IMAGES



None *C. sporogenes* *C. perfringens*
ATCC 11437 ATCC 13124

Incubation conditions : 35 ± 0.5°C / 48 ± 3 hours