

PRODUCT INFORMATION



DC Medium w/ BCIG

Cat. No. D04-116

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DESCRIPTION

DC Medium with BCIG is used in the differentiation of *Escherichia coli* from other coliforms in water samples using the membrane filtration method in a laboratory setting. This medium is enhanced by the addition of a chromogenic agent, BCIG, 5-bromo-4-chloro-3-indolyl- β -D-glucuronide to detect glucuronidase activity. The presence of the enzyme β -D glucuronidase differentiates most *E. coli* spp. from other coliforms, and is the same enzyme used in MUG reaction as described by Feng and Hartman¹. BCIG reacts slightly differently, and when released into the medium is insoluble, imparting a blue to purple color to presumptive *E. coli* colonies.

PREPARATION

Mix 49.78 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring until boiling to dissolve completely. DO NOT AUTOCLAVE. Cool to below 50°C and aseptically add 1.2 mL of a 10 g/L Cefsulodin sodium salt supplement. Mix well and distribute.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogeneous, free flowing and beige to gray-pink beige with or without blue particulate.
2. Visually the prepared medium is light to medium brick red.
3. Expected cultural response on supplemented medium after 18-24 hours at 35°C.

Organism:

Enterococcus faecalis ATCC® 29212
Escherichia coli ATCC® 11775
Escherichia coli ATCC® 25922
Proteus hauseri (vulgaris) ATCC® 13315

Result:

Inhibited
Growth; Blue Colonies
Growth; Blue Colonies
Growth; Straw Colored Colonies

Formula* per Liter:

Lactose	10.0g
Tryptose	10.0g
Yeast Extract.....	3.0g
Sodium Chloride.....	5.0g
Proteose Peptone	5.0g
Bile Salts	1.5g
BCIG	0.20g
Neutral Red.....	0.08g
Agar	15.0g

Final pH: 7.2 ± 0.2 at 25°C

* Grams per liter may be adjusted or formula supplemented to obtain desired performance.

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is solidified.

REFERENCES

1. Feng, P. C., and Hartmann, P.A. Fluorogenic assays for immediate confirmation of *Escherichia coli*. 1982. Appl. Environ. Microbiol. 43:6, p.1320-1329.