

CCI (Chromogenic Cronobacter Isolation) Agar



Medium used for the isolation and identification of Cronobacter spp.

• CONTENTS (Liter)

Tryptic Digest of Casein	7.0 g
Yeast Extract	3.0 g
Sodium Chloride	5.0 g
5-Bromo-4-Chloro-3-Indolyl- α -D-Glucopyranoside	0.15 g
Sodium Desoxycholate	0.25 g
Ammonium Iron (III) Citrate	1.0 g
Sodium Thiosulfate	1.0 g
Agar	15.0 g
Final pH = 7.3 \pm 0.2 at 25°C	

• PROCEDURE

Suspend 32.4 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

CCI (Chromogenic Cronobacter Isolation) Agar is a medium used for the isolation and identification of Cronobacter spp. Tryptic digest of casein and yeast extract provide carbon, nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic balance. 5-Bromo-4-Chloro-3-Indolyl- α -D-Glucopyranoside is the chromogenic substrate. *Cronobacter sakazakii* hydrolyzes this substrate to an indigo pigment, producing blue-green colonies in the medium. Sodium desoxycholate inhibits Gram-positive bacteria. Ammonium iron (III) citrate and sodium thiosulfate are included as indicators of hydrogen sulfide production. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 41.5 \pm 1°C for 24 \pm 2 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance : slightly opalescent with slight precipitate

Color: light amber

Incubation conditions: 41.5 \pm 1°C / 24 \pm 2 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Cronobacter sakazakii</i>	29544	50-100	good	blue-green colonies
<i>Escherichia coli</i>	25922	$\geq 10^3$	partially inhibited	straw colonies
<i>Staphylococcus aureus</i>	25923	$\geq 10^3$	inhibited	-

• 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. Iversen et al. 2008. Appl. Environ. Microbiol. 74, 2550-2552.
2. Refer to the MFDS.

• PACKAGE

Cat. No : MB-C3066 CCI (Chromogenic Cronobacter Isolation) Agar	100 G 500 G
--	----------------