

PRODUCT INFORMATION

Clostridium Difficile Agar

Cat. No. C09-109

Clostridium Difficile Agar is a solid medium employed for the isolation of *Clostridium difficile*.

DESCRIPTION

Clostridium Difficile Agar is a solid medium employed for the isolation of *Clostridium difficile*. In this medium, the selective agents D-Cycloserine and Cefoxitin inhibit the growth of most Enterobacteriaceae, Streptococcus faecalis, Staphylococci, Gram-negative non-sporing anaerobic bacilli, and Clostridium spp. other than Clostridium difficile, which may be found in large numbers in faecal samples. The growth of this species acidifies the medium and causes the Phenol Red indicator to shift to yellow. Egg Yolk Suspension reduces the toxic effect of the organic peroxides that might accumulate in the medium and allows for the detection of lecithinase and lipase activity. Proteose Peptone supplies amino acids and other nitrogenous compounds. Fructose is the fermentable carbohydrate. Sodium Chloride maintains the osmotic balance and the Potassium Phosphates serve as pH buffers. Agar is the gelifying agent.

FORMULA (g/L)

Peptone mixture	29.1 g	Beef heart infusion solids	9.9 g
Yeast	2.0 g	Sodium chloride	2.0 g
Magnesium sulfate	0.2 g	Potassium phosphate monobasic	1.0 g
Sodium phosphate dibasic	4.9 g	Agar	14.0 g
Soluble starch	5.9 g		

Final pH: 7.4 ± 0.2 at 25 °C

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

PREPARATION

Mix 69 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and light beige.
2. Visually the prepared medium is light amber (red when supplemented), with trace to light haze (opaque when suspended).
3. Expected cultural response after 48-72 hours at 35 °C ± 2°C.

ORGANISM	RESULT
<i>Bacteroides vulgatus</i> ATCC 8482	Inhibited
<i>Clostridium difficile</i> ATCC 9689	Good Growth
<i>Clostridium perfringens</i> ATCC 13124	Inhibited
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited

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 not free flowing or if the color has changed from the original color.