

PRODUCT INFORMATION

Cystine Heart Agar

Cat. No.

DESCRIPTION

Cystine Heart Agar is a solid medium recommended for the cultivation of the tularemia-causing bacteria *Francisella tularensis*, and, without enrichment, for Gram-negative cocci and other pathogenic organisms. Beef heart infusion and peptone provide amino acids, peptides, carbohydrates, vitamins and minerals. Dextrose is the fermentable carbohydrate. L-Cystine is a reducing agent, allowing the growth of *F. tularensis*. Agar is the solidifying agent. Rabbit blood and antimicrobial agents can be added to enrich the medium.

FORMULA (g/L)

Beef Extract Infusion Solids	10.0 g	Dextrose	10.0 g
Proteose Peptone	10.0 g	L-Cystine	1.0 g
Sodium Chloride	5.0 g	Agar	15.0 g

Final pH: 6.8 ± 0.2 at 25 °C

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

PREPARATION

Prepare double strength medium by mixing 10.2 grams of the medium in 100 mL of purified water until evenly dispersed. Heat with repeated stirring until boiling to dissolve completely. Autoclave at 121°C for 15 minutes. Cool to 45-50 °C and aseptically add 100 mL of sterile 2% hemoglobin solution. (To prepare the 2% hemoglobin solution: place 2.0 g of hemoglobin in a clean, dry flask. Add 100 mL purified water while mixing vigorously. Stir for 10-15 minutes until immersed into solution. Autoclave at 121 °C for 15 minutes).

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is hazy and light amber as a plain solution, opaque and brown with hemoglobin.
3. Expected cultural response after 66-72 hours at 35 °C (with Neisseria incubated under CO₂ conditions).



ORGANISM	RESULT
<i>Staphylococcus aureus</i> ATCC 25923	Good Growth
<i>Neisseria meningitidis</i> ATCC 13090	Good Growth
<i>Streptococcus pneumoniae</i> ATCC 6305	Good Growth

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.

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