

PRODUCT INFORMATION

HLP (Hsu's Lactobacillus Pediococcus) Medium

Cat. No. H08-107

DESCRIPTION

HLP Medium is a selective semi-solid medium that allows for the detection of Lactobacillus and Pediococcus species, while restricting the growth of culture yeast. The inclusion of agar at 2% makes it a semisolid medium, which offers a means of identifying lactic acid bacteria to the genus level on the basis of colony morphology.

FORMULA (g/L)

Sodium Acetate Anhydrous	2.0 g	Corn Syrup Solids	29.2 g
Citric Acid	1.25 g	Malt Extract	5.0 g
Cycloheximide	0.01 g	Sodium Sulfate	4.4 g
D-Pantothenic Acid	1.0 g	Mercaptoacetic Acid	0.55 g
Tomato Juice Broth	19.0 g	Agar	1.6 g
Yeast Extract	5.0 g		

Final pH: TBD

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

PREPARATION

Mix 7 grams of the medium in 100 mL of purified water until evenly dispersed. Heat with repeated stirring and boil for 2-3 minutes to dissolve completely. Autoclaving is not necessary. Cool medium to approximately 45-50 °C in a water bath and transfer aliquots of 17 mL to sterile 16x150 mm test tubes, leaving around 1 cm (or equivalent to desired sample volume) of headspace. Apply caps and screw tightly.

Alternatively, 1.5 to 2.9 grams of agar may be added in addition to the 7 grams of medium in order to produce solid media. If this is the desired application, pour the prepared medium in sterile petri dishes and test according to desired protocol.



DETECTION

Once tubed, introduce a 0.1-1.0 mL test sample (or diluted sample) to the cooled, sterile HLP. Avoid a large headspace. Recap the tubes and gently invert twice to uniformly distribute microbial load throughout the tubes. Incubate closed tubes at 28-30°C aerobically for 48 hours. Include an uninoculated tube as a sterility control. Tubes that are negative for growth should be examined daily for 72-96 hours to determine a final count and ensure true absence of microbes. If heavy contamination with acetic acid bacteria is suspected, 2-4 mL of sterile paraffin oil may be used to overlay the surface of the medium after inoculation to provide a strictly anaerobic environment.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing with soft lumps and yellow beige to yellow tan.
2. Visually the prepared medium is gold to light amber and clear to trace hazy with none to light precipitate.

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.