



Helicobacter Pylori Selective Agar | AS-1249

Used for selective isolation of *Helicobacter pylori* from clinical samples.

Helicobacter pylori Selective Agar is a specialized culture medium designed for the isolation and cultivation of *Helicobacter pylori*. *H. pylori* is a bacterium associated with peptic ulcers and gastric cancer. In fact, the base medium is Columbia blood agar which must be supplemented with defibrinated sheep blood and a combination of antibiotics.

To ensure selective growth of *H. pylori*, the medium supplemented with a combination of antibiotics: vancomycin to inhibit Gram-positive bacteria, amphotericin B for antifungal activity, trimethoprim to suppress most enteric bacteria, and cefsulodin to inhibit *Pseudomonas aeruginosa*. These antibiotics allowing for the preferential growth of *H. pylori*.

The medium contains essential nutrients such as peptone and cornstarch to support bacterial growth. Sheep blood provides growth factors and facilitate hemolysis detection. Optimal growth conditions for *H. pylori* include a microaerophilic atmosphere and incubation at 42°C. Following isolation, biochemical tests are performed to confirm the identity of *H. pylori*.

Composition (gr/L)

Peptone, special	23
Corn starch	1
Sodium chloride	5
Agar	15
Final pH at 25°C	7.3 ± 0.2

Preparation

Dissolve 44 g of the powder into 1 liter distilled water. Mix well. Autoclave at 121 °C for 15 minutes. Allow to cool to 45 to 50 °C and in sterile condition, add 70 ml sterile defibrinated sheep blood, 10 mg vancomycin, 5 mg trimethoprim, 5 mg Cefsulodin, 5 mg amphotericin B. Mix well and pour into sterile petri dishes.

Quality Control

Dehydrated Appearance: Beige, free-flowing, homogeneous.

Prepared Appearance with sheep blood: Cherry red, opaque, no hemolysis.

Reaction of 4.4% Solution at 25°C: pH 7.3 ± 0.2

Microbial Test Results

Incubate at 35 ± 2 °C for 18 to 48 hours. Keep the plates microaerophilic conditions (5-10% CO₂).

Organism (ATCC)	Growth	Hemolysis
<i>Helicobacter pylori</i> (43526)	Good	None
<i>Staphylococcus aureus</i> (25923)	Inhibited	-
<i>Candida albicans</i> (10231)	Inhibited	-



Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.