

# PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

## Cat No. PD189 - HELICOBACTER PYLORI SELECTIVE AGAR

### Intended Use:

Selective medium for the isolation of *Helicobacter pylori*.

### Principles and uses:

*Helicobacter* organisms are known cause of peptic ulcers in humans.

Pancreatic digest of casein, meat peptic digest and Heart pancreatic digest provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract and maize starch are a source of vitamins, particularly of the B-group essential for bacterial growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent. The blood is source providing growth factors for the microorganisms and is the basis for determining hemolytic reactions. Vancomycin inhibits gram positive *Staphylococcus*, *Streptococcus* and *Bacillus* species. Colistin inhibits Gram negative bacteria, Nystatin is an antifungal agent, while other enteric bacteria can be inhibited by Trimethoprim including *Proteus*.

### Limitations:

1. *Helicobacter* species are very sensitive to aerobic atmosphere therefore inoculate the specimen on suitable medium as soon as possible to avoid viability loss.
2. Other *Helicobacter* species may also grow on this media. Therefore, carry out biochemical and confirmatory tests of the suspected *Helicobacter* colonies.
3. Feces specimens are not recommended as *Helicobacteria* are present in a non- culturable (coccoid) form.
4. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium

**Cultural Response:** primary isolation after 5-7 days incubation in a microaerophilic atmosphere.

### Composition

Bacteriological agar	13.5 g/L
Maize starch	1 g/L
Pancreatic digest of casein	10 g/L
Sodium chloride	5 g/L
Yeast extract	5 g/L
Meat peptic digest	5 g/L
Heart pancreatic digest	3 g/L
Vancomycin	3 mg/L
Colistin	7.5 mg/L
Nystatin	12500 U/L
Trimethoprim	5 mg/L
Defibrinated Horse Blood	100ml/L

**Storage:** 2-8 °C  
**Appearance:** Red coloured  
**pH Range:** 7.1 - 7.5

**Package contents:** 10 plates in a package  
**Exp. Date:** Printed on label and on the item.  
**Required materials not supplied:** Laboratory equipment as required.

**Warning and Precautions** - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.  
If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8°C. Avoid freezing and overheating. Do not open until ready to use.

**Performance Testing Results:**  
Streaking from fresh colony culture.  
**Inhibition test:** 1000 cfu

TEST	ATCC	Incubation Temp. (°C)	Incubation Cond	Reaction 1	
<i>Helicobacter pylori</i>	43526	30-35 °C	Microaerophilic, 3-5 days	Growth	Very small transparent
<i>Escherichia coli</i>	25922	30-35 °C	Microaerophilic, 3-5 days	Inhibited	
<i>Proteus mirabilis</i>	4630	30-35 °C	Microaerophilic, 3-5 days	Inhibited	
<i>Staphylococcus aureus</i>	25923	30-35 °C	Microaerophilic, 3-5 days	Inhibited	
<i>Enterococcus faecalis</i>	19433	30-35 °C	Microaerophilic, 3-5 days	Inhibited	
<i>Candida albicans</i>	10231	30-35 °C	Microaerophilic, 3-5 days	Partially Inhibited	