



APT Agar | AS-1120

Used for cultivating heterofermentative lactobacilli and other organisms with high thiamine content requirement.

A non-selective culture medium called APT (All-Purpose Tween 80) Agar is intended to enhance the growth of lactic acid bacteria of all kinds, especially heterofermentative species like *Lactobacillus*, *Leuconostoc*, and *Lactococcus*. Peptone, yeast extract, glucose, and Tween 80 are added to the medium as major nutrients, in addition to necessary mineral salts. Fatty acids are included in Tween 80 and are essential for *lactobacilli's* metabolism. These bacteria are isolated and enumerated using APT Agar from a variety of food matters like meat, dairy, and fruit juices. The medium's ability to enhance the growth of organisms that require thiamine also makes it suitable for use in thiamine microbiological assays.

Composition (gr/L)

Peptone from Casein	12.5
Yeast Extract	7.5
D (+) glucose	10
Sodium Chloride	5
Tri-sodium Citrate	5
Dipotassium Hydrogen Phosphate	5
Tween 80	0.2
Magnesium Sulfate	0.8
Manganese Chloride	0.14

Iron (II) Sulfate	0.04
Thiamine Dichloride	0.001
Agar	13.5
Final pH at 25°C	6.7 ± 0.2

Preparation

Dissolve 59.7 g of the powder into 1 liter distilled water. Autoclave at 121 °C for 15 minutes. DO NOT OVERHEAT.

Quality Control

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Prepared Appearance: Medium amber, clear to slightly opalescent, may have a slight precipitate.

Reaction of 5.97% Solution at 25°C: pH 6.7 ± 0.2

Microbial Test Results

Incubate at 35±2 °C for 24 to 48 hours.

Organism (ATCC)	Recovery
<i>Lactobacillus fermentum</i> (9338)	Good
<i>Lactobacillus acidophilus</i> (4356)	Good
<i>Weissella viridescens</i> (12706)	Good

Storage

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