

## Product Data Sheet

### APT BROTH

**Product No.** GB-DCM-00039-1A

### INTENDED USE

For cultivation of hetero-fermentative Lactobacilli and other organisms by extra thiamine content.

### Product Description

APT (All purpose Tween 80) Broth is formulated as per Evans and Niven for cultivation and maintenance of Lactobacillus viridescens ATCC 12706 used in the microbiological assay of thiamine. APT Broth is recommended for the cultivation of hetero fermentative lactic acid bacteria requiring high thiamine content. The composition of APT Broth is similar to APT Agar, which is formulated as recommended by APHA for the microbiological examination of cured meats, souerkraut, except agar. APT Broth is used for growing Weissella viridescens ATCC 12706 (formerly Lactobacillus viridescens) and also for preparing the inoculum for thiamine assay.

### Product Specifications

Ingredients	Gms / Ltr
Tryptone	12.500
Yeast extract	7.500
Dextrose (Glucose)	10.000
Sodium citrate	5.000
Sodium chloride	5.000
Dipotassium hydrogen phosphate	5.000
Magnesium sulphate	0.800
Manganese chloride	0.140
Ferrous sulphate	0.040
Polysorbate 80 (Tween 80)	0.200
Thiamine hydrochloride	0.001



## PRINCIPLE

Although this medium was devised for Lactobacilli, it is rich due to nutrients like Tryptone, yeast extract, dextrose, and polysorbate 80 and hence can support growth of commensal microflora including coliform bacteria. The metallic salts are essential for the replication of Lactobacilli or lactic Streptococci. Polysorbate 80 acts as fatty acid source.

## QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder.  
 Appearance of prepared medium: Light amber coloured clear to slightly opalescent gel forms in Petri plates.  
 PH (at 25°C): 6.7±0.2

Microorganism	ATCC	Inoculum (CFU)	Growth	Recovery	Incubation Temperature	Incubation Period
Lactobacillus acidophilus	4356	50-100	Good-Luxuriant	≥50%	35-37°C	18-24 Hours
Weissella viridescens	12706	50-100	Good-Luxuriant	≥50%	35-37°C	18-24 Hours
Leuconostoc mesenteroides	12291	50-100	Good-Luxuriant	≥50%	35-37°C	18-24 Hours
Lactobacillus casei	9595	50-100	Good-Luxuriant	≥50%	35-37°C	18-24 Hours
Lactobacillus plantarum	8014	50-100	Good-Luxuriant	≥50%	35-37°C	18-24 Hours

## STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.



### **Product Deterioration**

Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

### **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### **INSTRUCTION FOR USE**

- Dissolve 46.2 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- AVOID EXCESSIVE HEATING.

**This product is for research use only.**