

## GYC AGAR

CAT N°: 2026

Acetic Bacteria Medium

### FORMULA IN g/l

Dextrose	50.0	Calcium Carbonate	5.0
Yeast Extract	10.0	Bacteriological Agar	20.0

Final pH 6.8 ± 0.2 at 25°C



*Acetobacter aceti*  
ATCC 15973

### PREPARATION

Suspend 85 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. If desired, cool to 45-50°C and aseptically add 70 ml of ethanol. AVOID OVERHEATING. DO NOT AUTOCLAVE. Mix well and dispense into plates. The prepared medium should be stored at 2-8°C. The color of the prepared medium is light amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

### USES

GYC AGAR described by Swings (1992) detects the presence of acid-producing microorganisms and is regarded as "standard growth medium" for acetic acid bacteria.

Dextrose is the fermentable carbohydrate providing carbon and energy. Yeast extract is source of vitamins, particularly the B-group. Grown on this medium, *Acetobacter* will produce clear zones or halos around colonies because the acid being produced will neutralize the CaCO<sub>3</sub>. Unlike the lactic acid bacteria, acetic acid bacteria are obligate aerobes and so it is necessary to use spread plates. Bacteriological agar is the solidifying agent.

Inoculate and incubate at 28-30°C for 3-5 days.

### MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium after incubation at a temperature of 28-30°C and observed after 3-5 days.

Microorganisms	Growth
<i>Acetobacter aceti</i> ATCC 15973	Good

### BIBLIOGRAPHY

Madigan M.Martinko J (editors) (2005). Brock Biology of Microorganisms (11th ed. Edición).

## STORAGE

Once opened keep powdered medium closed to avoid hydration.

