

Acetate Differential Agar

Medium used for the differentiation of *Shigella* spp. from *Escherichia* spp..

• CONTENTS (Liter)

Sodium Acetate	2.0 g
Sodium Chloride	5.0 g
Magnesium Sulfate	0.2 g
Bromothymol Blue	0.08 g
Monoammonium Phosphate	1.0 g
Dipotassium Phosphate	1.0 g
Agar	19.8 g
Final pH = 6.9 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 29.08 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Dispense in tubes. Arrange tubes in a slanted position.

• INTERPRETATION

Acetate Differential Agar is a medium used for the differentiation of *Shigella* spp. from *Escherichia* spp.. Monopotassium phosphate and dipotassium phosphate have a high buffering capacity. Sodium chloride maintains the osmotic balance. Magnesium sulfate is a cofactor for many metabolic reactions. Sodium acetate is the selective agents. Bromothymol blue is pH indicator.

• TECHNIC

Inoculate the tube to stab the bottom and spreading the specimen on the slant surface using a sterile needle. Incubate at 36 ± 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light green.

Prepared medium

Appearance: very slightly opalescent without precipitate.

Color: green.

Incubation conditions: 36 ± 1°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	blue colonies
<i>Shigella flexneri</i>	12202	50-100	inhibited	-

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Trabulsi and Ewing (1962) Public Health Lab. 20: 137.

• PACKAGE

Cat. No : MB-A2101 Acetate Differential Agar	500 G
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• MICROBIAL CULTURE IMAGES

slanted position



Escherichia coli
ATCC 25922
(≥500CFU)



Escherichia coli
ATCC 25922
(≥500CFU)

Incubation conditions : 35±2°C 2~7 days, anaerobic condition