

Aac (*Acidovorax avenae* subsp. *citrulli*) Selective Agar



Medium used for the cultivation and isolation of *Acidovorax avenae* subsp. *citrulli*.

• CONTENTS (Liter)

Disodium Hydrogen Phosphate	2.5 g
Monopotassium Phosphate	0.5 g
Magnesium Sulfate Heptahydrate	0.029 g
Calcium Chloride	0.067 g
Sodium Molybdate Dihydrate	0.025 g
Yeast Extract	0.01 g
Ammonium Adipate	10.0 g
Ammonium Sulfate	2.0 g
Bromothymol Blue	0.0125 g
Cycloheximide	0.03 g
Agar	15.0 g

Final pH = 7.2 ± 0.2 at 25°C.

• PROCEDURE

Suspend 30.17 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. Aseptically add 2 vials of Aac Selective Agar supplement(MB-A0830). Mix well. Dispense in petri dishes.

Aac Selective Agar supplement

1 vial content (each vial is sufficient for 500mL of medium)

Ampicillin 0.01 g

• INTERPRETATION

Aac (*Acidovorax avenae* subsp. *citrulli*) selective agar is used for the cultivation and isolation of *Acidovorax avenae* subsp. *citrulli*. This medium can add phenethicillin potassium and novobiocin for better detecting Aac (*Acidovorax avenae* subsp. *citrulli*) from soil. Yeast extract provides nitrogen, carbon, amino acids and vitamins. Disodium hydrogen phosphate and monopotassium phosphate are buffering agents. Ammonium sulfate provides nitrogen. Magnesium sulfate heptahydrate is a cofactor for many metabolic reactions. Cycloheximide inhibits the growth of fungi. Calcium chloride improves growth and bromothymol blue is pH indicator. Ampicillin inhibits growth for gram negative and gram positive organisms.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of medium using a sterile loop. Incubate at 40 ± 2°C for 4 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: greenish yellow.

Prepared medium

Appearance: opaque.

Color: greenish light blue.

Incubation conditions: 40 ± 2°C / 4 days

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Acidovorax avenae</i> subsp. <i>citrulli</i>	29625	50-100	good	blue to pale green colonies

• 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. Shirakawa 2002; Shirskawa et al. 2000a.
2. A method to evaluate percentage of cucurbit seeds infested with *Acidovorax avenae subsp. Citrulli*, pathogen of bacterial fruit blotch. Journal of General Plant Pathology. The Phytopathological Society of Japan.; Masaharu Kubota, Naoko Hagiwara, Takashi Shirakawa. (2011) 77 :112-115

• PACKAGE

Cat. No : MB-A0854 <i>Aac (Acidovorax avenae subsp. citrulli)</i> Selective Agar	500 G
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