

# AGS (Arginine Glucose Slant) Agar



Medium used for the differentiation of *Enterobacteria* spp. and *Vibrio* spp..

## • CONTENTS (Liter)

Peptone	5.0 g
Yeast Extract	3.0 g
Tryptone	10.0 g
Sodium Chloride	20.0 g
Glucose	1.0 g
L-Arginine	5.0 g
Ferric Ammonium Citrate	0.5 g
Sodium Thiosulfate	0.3 g
Bromocresol Purple	0.02 g
Agar	13.5 g
Final pH = 6.9 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 58.32 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 10 - 12 minutes. Cool to 45-50°C in water bath. Dispense in tubes. Arrange tubes in a slanted position. If necessary, dispense the medium before autoclave.

## • INTERPRETATION

AGS (Arginine Glucose Slant) Agar is a medium used for the differentiation of *Enterobacteria* spp. and *Vibrio* spp. .. Tryptone and peptone provide nitrogen, carbon, amino acids and minerals. Yeast extract provides vitamins. Sodium chloride maintains osmotic balance. Glucose is the fermentable carbohydrate. Ferric ammonium citrate and sodium thiosulfate are components of H<sub>2</sub>S indicator system. Bromocresol purple is the pH indicator. Agar is the solidifying agent.

## • TECHNIC

Inoculate the tube to stab the bottom and spreading the specimen on the slant surface using a sterile needle. Incubate at 35 ± 2 °C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: greenish yellow.

### Prepared medium

Appearance: opalescent.

Color: purple.

Incubation conditions: 35 ± 2 °C / 18 - 24 hours

Microorganism	ATCC	Growth	Slant	Butt	Gas	H <sub>2</sub> S
<i>Vibrio alginolyticus</i>	17749	good	alkaline	acid	-	-
<i>Vibrio vulnificus</i>	29306	good	alkaline	acid	+	-
<i>Escherichia coli</i>	25922	good	alkaline	alkaline	+	-
<i>Salmonella typhimurium</i>	14028	good	alkaline	acid	+	+

## • 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. Original Source: Bacteriological Analytical Manual, 8th Edition, Revision A, 1998.

## • PACKAGE

Cat. No : MB-A0812 AGS (Arginine Glucose Slant) Agar	500 G
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## • MICROBIAL CULTURE IMAGES



None

*E.coli*  
ATCC  
25922  
( $\geq 10^8$ CFU)

*S.typhimurium*  
ATCC 14028  
( $\geq 10^8$ CFU)

Incubation conditions : 36°C, 24-48h