

# Kanamycin Esculin Azide Agar



Medium used for the isolation and identification of Enterococci in foodstuffs.

## • CONTENTS (Liter)

Tryptone	20.0 g
Yeast Extract	5.0 g
Sodium Chloride	5.0 g
Sodium Citrate	1.0 g
Esculin	1.0 g
Ferric Ammonium Citrate	0.5 g
Sodium Azide	0.15 g
Kanamycin Sulfate	0.02 g
Agar	15.0 g

Final pH = 7.0 ± 0.2 at 25°C

## • PROCEDURE

Suspend 47.67 G of powder in 1L 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. Mix well. Pour into petri dishes.

## • INTERPRETATION

Kanamycin Esculin Azide Agar is a medium used for the isolation and identification of Enterococci in foodstuffs. Tryptone and yeast extract are sources of carbon, nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic balance. Sodium citrate inhibits some Gram-positive organisms. Esculin is hydrolyzed to esculentin and dextrose by enterococci. Esculetin reacts with ferric ammonium citrate and forms a zone of black or dark brown precipitates around the colonies. Sodium azide and kanamycin sulfate are the selective agents to inhibit Gram-negative and Gram-positive bacteria other than Enterococci. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C or 42°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

### Prepared medium

Appearance : clear to slightly opalescent

Color: greenish light amber

Incubation conditions: 36 ± 1°C or 42°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Enterococcus faecium</i>	19434	50-100	good	grayish black colonies with black halo
<i>Enterococcus faecalis</i>	29212	50-100	good	grayish black colonies with black halo
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	inhibited	-
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	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. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Mossel, D.A.A., P.G.H. Bijker, and I. Eelederink I. (1978) Arch. Lebensmittel Hfg. 29, 121-127.
2. Mossel, D.A.A., I. Eelederink, H. de Vor, and E.D. Keizer. (1976) Lab. Practice 25: 393-395.
3. Reuter, G. (1985). Inter. J. Food Microbiol. 2: 103-114.

**• PACKAGE**

Cat. No : MB-K1190 Kanamycin Esculin Azide Agar	500 G
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