
Product Name : Xanthine Agar

Medium for differentiate aerobic *Actinomycetes* in the basis of starch hydrolysis.

CONTENTS (G/L)

Pancreatic Digest of Gelatin 5.0
Beef Extract 3.0
Sodium Chloride 8.0
Xanthine 4.0
Agar 15.0
Final pH = 6.6 ± 0.2 at 25°C.

PROCEDURE

Suspend 35.0 G of powder in 1 L of distilled or deionized water. Heat until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Dispense in petri dish.

INTERPRETATION

Xanthine Agar is the medium for differentiate aerobic *Actinomycetes* in the basis of starch hydrolysis. Pancreatic digest of gelatin, beef extract and starch provide nutrients for growth of microorganisms. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent. Xanthine hydrolysis is indicated by colorless zone around colonies.

TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 28 ± 0.5°C for 7 days.

QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: cream to white.

Prepared medium

Appearance: opaque.

Color: cream to white.

Incubation conditions: 28 ± 0.5°C / 7 days.

Microorganism	ATCC	Inoculum CFU	Growth	hydrolysis
<i>Streptomyces rimosus</i>	10970	heavy	good	+
<i>Nocardia asteroides</i>	19247	heavy	good	-

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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 are evident. Store prepared plates at 2-6°C.

REFERENCES

1. Land, G.A. 1992. Aerobic actinomycetes, p. 4.0.1-4.1.9. *In H.D. Isenberg (ed.), Clinical microbiology procedures handbook, vol 1.* American Society for Microbiology, Washington, D.C.
2. Beaman, B.L., M.A. Saubolle, and R.J. Wallace. 1995. *Nocardia, Rhodococcus, Streptomyces, Oerskovia, and other aerobic actinomycetes of medical importance, p. 379-399. In P.R. Murray, E.J. Baron, M.A. Pfaller, F.C. Tenover, and R.H. Tenover (ed.), Manual of clinical microbiology, 6th ed.* American Society for Microbiology, Washington, D.C.
3. Holt, J.G., N.R. Krieg, P.H.A. Sneath, J.T. Staley, and S.T. Williams (ed.). 1994. *Bergey's Manual® of determinative bacteriology, 9th ed.* Williams & Wilkins, Baltimore.

PACKAGE

Cat. No : MB-S0847 Xanthine Agar	500 G
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