

Casein Agar



Medium used for differentiation of aerobic actinomycetes in the basis of casein hydrolysis.

• CONTENTS (Liter)

Skim Milk	40.0 g
Agar	20.0 g
Final pH = 6.6 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 60.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 115°C for 20 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

• INTERPRETATION

Casein Agar is a medium used for differentiation of aerobic actinomycetes in the basis of casein hydrolysis. The aerobic actinomycetes are a heterogeneous group of genera and include species of *Nocardia* and *Streptomyces*. Skim milk provides nutrients for growth of microorganisms. Agar is the solidifying agent. Casein hydrolysis show zone of clearing around the growth of microorganisms.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35°C for 7 – 21 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: cream to white.

Prepared medium

Appearance: opaque with a precipitate.

Color: cream to white.

Incubation conditions: 35°C / 7 - 21 days

Microorganism	ATCC	Inoculum CFU	Growth	Hydrolysis
<i>Streptomyces rimosus</i>	10970	heavy	good	+
<i>Streptomyces albus</i>	3004	heavy	good	+
<i>Nocardia asteroides</i>	19247	heavy	good	-
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	+
<i>Escherichia coli</i>	25922	50-100	good	-

• 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. 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-C0844 Casein Agar	500 G
-----------------------------------	-------