

# PLET Agar

Medium used for the isolation and cultivation of *Bacillus anthracis*.

## • CONTENTS (Liter)

Beef Heart Infusion	10.0 g
Tryptose	10.0 g
Sodium Chloride	5.0 g
EDTA	0.3 g
Thallos Acetate	0.04 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 40.34 G of powder in 1 L of distilled or deionized water. If necessary, adjust pH to 7.3 ± 0.2. 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 Anthracis Selective supplement (MB-A0716). Mix well. Pour into petri dishes.

### Anthracis Selective supplement

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

Lysozyme	150,000 IU
Polymyxin B Sulfate	15,000 IU

## • INTERPRETATION

PLET Agar is a medium used for the isolation and cultivation of *Bacillus anthracis*. Beef heart infusion and tryptose provide amino acids and other nitrogenous compounds. Sodium chloride maintains the osmotic balance. EDTA, thallos acetate and anthracis selective supplement are the selective agents for the growth of *Bacillus anthracis*. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 36 - 40 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

### Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: 36 ± 1°C / 36 - 40 hours

Microorganism	ATCC	Growth
<i>Bacillus anthracis</i>	14578	good
<i>Bacillus cereus</i>	11778	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. Knisely R.F. 1966, J. Bacteriol, 92:784-786.
2. J.R. Norris, C.W. Berkley, N.A. Logan, A.G. O'Donnell, In M.P. Starr et al (ed), The Prokaryotes: a Handbook on Habitats, Isolation and Identification of Bacteria, vol. 2, Springer Verlag, Berlin (1981)
3. Parry J.M., Turnbull P.C.B. and Gibson J.R., 1983, A Colour Atlas of Bacillus species. Wolfe Medical Publications, London, United Kingdom.
4. Murray et al., Manual of Clinical Microbiology, 7th Edition, ASM Press, Washington D.C. (1999)
5. D.C. Dragon, R.P. Rennie, Evaluation of spore extraction and purification methods for selective recovery of viable Bacillus anthracis spores, Appl. Microbiol., Vol 33, 2, 100 (2001)

## • PACKAGE

Cat. No : MB-P0715 PLET Agar	500 G
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