



Cetrimide Agar

U.S.P.

LAB 133

Description

A medium recommended by the United States Pharmacopoeia for the isolation of *Pseudomonas aeruginosa* from pharmacological preparations. Subculture is carried out onto the medium after enrichment in LAB 4 Tryptone Soy Broth. Cetrimide inhibits the growth of many micro organisms whilst allowing *P. aeruginosa* to develop typical colonies which will fluoresce in ultraviolet light and produce green pigment.

| Formula | g/litre |
|---------------------------------------------|---------|
| Pancreatic Digest of Gelatin | 20.0 |
| Magnesium chloride | 1.4 |
| Potassium sulphate | 10.0 |
| Cetyl trimethylammonium bromide (cetrimide) | 0.3 |
| Agar | 13.6 |

Method for reconstitution

Weigh 45.3 grams of powder, disperse in 1 litre of deionised water. Add 10ml of glycerol, allow to soak for 10 minutes then swirl to mix. Sterilise at 121°C for 10 minutes.

Appearance: Opalescent, pale yellow agar.

pH: 7.2 ± 0.2

Minimum Q.C. organisms: *P. aeruginosa* NCIMB 50067
E. coli (inhibition) NCIMB 50034

Storage of Prepared Medium: Plates – up to 7 days at 2-8°C in the dark.

Inoculation: Subculture from enrichment broth, streak out for single colonies.

Incubation: 30-35°C aerobically for 24-48 hours.

| Growth Characteristics | | | |
|------------------------|------------------|-----------------|----------------------------------------------------------|
| organism | colony size (mm) | shape & surface | colour |
| <i>P. aeruginosa</i> | 0.5-1.0 | F.C.R.D. | green pigment (non pigment) green/yellow fluorescence |
| <i>P. fluorescens</i> | 0.5 | CV.R.E.G. | green/yellow fluorescence |
| <i>E. coli</i> | N.G. | | |
| <i>S. aureus</i> | N.G. | | |
| <i>Proteus</i> spp. | N.G. | | |

References

United States Pharmacopoeia XXI. 1985.

Brown V.I., Lowbury E.J.L. (1965). Use of an improved Cetrimide Agar Medium and other culture methods for *Pseudomonas aeruginosa*. J. Clin. Pathol. 18, 752-756.