

68879 Phenolphthalein phosphate agar

Phenolphthalein Phosphate Agar is recommended for identification of phosphatase positive colonies of *Staphylococcus aureus*.

Composition:

Ingredients	Grams/Litre
Peptic Digest of Animal Tissue	5.0
Beef Extract	3.0
Sodium Chloride	5.0
Sodium Phenolphthalein Phosphate	0.012
Agar	15.0
Final pH 7.4 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Yellow colored, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Yellow colored, clear gel forms in petri plates.

Directions:

Suspend 28 g of Phenolphthalein Phosphate Agar in 1000 ml of distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes.

Principle and Interpretation:

Phosphatase production is determined by the liberation of phenolphthalein which is indicated by a change in color of the agar. When, alkali is added to this medium, the released phenolphthalein gives a bright, pink-red color. The peptic digest of animal tissue and beef extract supply the nitrogenous compounds and growth factors for the growth of *Staphylococcus aureus*. Sodium phenolphthalein phosphate serves as a substrate for the phosphatase enzyme. Sodium chloride maintains the osmotic equilibrium.

Cultural characteristics after 18-24 hours at 37°C.

Organisms (ATCC)	Growth	Phosphatase
<i>Staphylococcus aureus</i> (25923)	+++	+
<i>Staphylococcus epidermidis</i> (12228)	+++	+
<i>Escherichia coli</i> (25922)	+++	-

References:

1. MacFaddin, J., (1980). Biochemical Tests for Identification of Medical Bacteria. 2nd Edition. Williams and Wilkins. Baltimore, Maryland.
2. Lewis, B., (1961)., J. Med. Lab. Technol. 18,112.
3. Barber, M., et al., (1951). J. Pathol. Bacteriol. 63, 65.
4. American Type Culture Collection, Manassas, Va., U.S.A.

Precautions and Disclaimer This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

