Propionibacter Isolation Agar Base

M956

Intended Use:

For selective isolation of *Propionibacteria.*

Composition**

Ingredients	g / L
Tryptone	10.000
Yeast extract	10.000
Magnesium sulphate	0.050
Dipotassium hydrogen phosphate	0.250
Agar	20.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 40.3 grams in 1000 ml purified / distilled water. Add 10 grams of sodium lactate to the medium. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Propionibacter Isolation Agar was originally described by Vedamuthu and Reinbold (1). It is now recommended by APHA (2) for selective isolation of *Propionibacteria* from foods like cheese. Isolation of *Propionibacteria* from foods and other sources is difficult as they grow slowly on solid media and presence of other microbial flora that may overgrow them. They are also difficult to isolate because of their tendency towards anaerobiosis, due to which they do not grow under conventional plating conditions. Propionibacter Isolation Agar is also known as YELA Agar (2). Tryptone and yeast extract in the medium provide nitrogenous compounds, sulphur, trace elements and vitamin B complex essential for the growth of *Propionibacteria*. Sodium lactate serves as the carbon source. Individual colonies may be confirmed by microscopic examination and by detection of propionic acid production by gas chromatography or HPLC.

Type of specimen

Clinical samples - pores and hair follicles, swab of infection skin, etc; Food and dairy samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).
For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (2,5,6).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens.Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Individual colonies may be confirmed by microscopic examination and by detection of propionic acid production by gas chromatography or HPLC.
2. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 2.0% agar gel.

Colour and Clarity

Dark amber coloured clear to slightly opalescent gel

Reaction

Reaction of 4.03% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

Cultural characteristics observed under anaerobic or microaerophilic conditions, after an incubation at 30-32°C for upto 11 to 14 days.

Organism	Growth
Propionibacterium rubrum ATCC 4871	good-luxuriant
Propionibacterium shermanii ATCC 9641	good-luxuriant
Propionibacterium thoenii ATCC 4874	good-luxuriant

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Vedamuthu E. and Reinbold G., 1975, Appl. Microbiol., 29:807.
2. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
6. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed.,APHA Inc., Washington, D.C.

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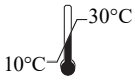
IVD ***In vitro*** **diagnostic medical device**



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

CE Marking

Do not use if package is damaged

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