

TM 1331 – ASLA AGAR BASE

INTENDED USE

For selective isolation and cultivation of *Propionibacterium* species.

PRODUCT SUMMARY AND EXPLANATION

Propionibacteria are difficult to isolate from foods and other natural sources. They grow slowly on solid media and prefer anaerobic or microaerophilic conditions. Selective media designed for Propionibacteria have been based on their ability to metabolize lactic acid under anaerobic conditions. Sodium Lactate Agar was originally described by Vedamuthu and Reinbold. Peberdy and Fryer described a defined selective medium namely ASLA Agar for the isolation of Propionibacteria from cheese which is recommended by APHA.

The individual colonies may be confirmed as Propionibacteria by microscopic examination for typical pleomorphic rod shape and by detection of propionic acid production by gas chromatography or HPLC. This medium may not support the growth of all Propionibacteria present in natural sources.

COMPOSITION

Ingredients	Gms / Ltr
Ammonium sulphate	3.000
Disodium phosphate	1.200
Monopotassium phosphate	1.200
Manganese sulphate	0.050
Magnesium sulphate	0.200
Ferric sulphate	0.040
L-Cysteine hydrochloride	0.500
Agar	10.000

PRINCIPLE

Ammonium sulphate in the medium acts as nitrogen source and sodium lactate as carbon source. L-cysteine, an amino acid, also acts as a reducing agent. Phosphates buffer the medium whereas salts provide trace elements.

INSTRUCTION FOR USE

- Dissolve 8.1 grams in 500 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Add 10 grams of Sodium lactate. Mix well and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45°C and aseptically add rehydrated contents of 1 vial of Propionibacteria Growth Supplement.
- Mix thoroughly and pour into sterile Petri plates or tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates or tubes.
pH (at 25°C)	: 6.5±0.2

INTERPRETATION



Cultural characteristics observed under anaerobic or microaerophilic conditions with added sterile Propionibacteria growth supplement after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Propionibacterium acidipropionici</i>	25562	50-100	Good-luxuriant	>=50%	30-32°C	11-14 Days

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Vanderzant C. and Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington D.C.
2. Vedamuthu E. R., and Reinbold G. W., 1967, Milchwissenschaft; 22:428.
3. Peberdy M. F. and Fryer T. F., 1976, N. Z. J. Dairy Science Technol, 11:10.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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