

YEAST EXTRACT SODIUM LACTATE MEDIUM

Medium for cultivating and enumerating propionibacteria.

TYPICAL FORMULA	(g/l)
Enzymatic Digest of Casein	10.0
Yeast Extract	10.0
Potassium Phosphate, Monobasic	2.5
Sodium Lactate	10.0
Magnesium Sulphate	0.005
Agar	15.0
Final pH 7.0 ± 0.2 at 25°C	

DESCRIPTION

YEAST EXTRACT SODIUM LACTATE MEDIUM is used for the cultivation and enumeration of propionibacteria from food (milk and dairy products) and clinical specimens (human skin).

PRINCIPLE

Enzymatic digest of casein supplies amino acids, nitrogen, carbon, minerals, vitamins and other nutrients which support the growth of microorganisms. Yeast extract is a source of vitamins, particularly of B-group. Potassium phosphate is the buffer. Propionibacteria convert lactate into propionic acid, acetic acid and carbon dioxide. Agar is the solidifying agent.

PREPARATION

Suspend 47.5 g of powder in one liter of deionized or distilled water. Bring to boil and shake until completely dissolved. Sterilize at 121°C for 15 minutes. Cool up to 45-50°C. Aseptically, pour in Petri dishes.

TECHNIQUE

Inoculate the plates by streaking the sample* onto the agar surface. Incubate anaerobically at either 30°C or 37°C, depending on the nature of the sample, for up to 14 days.

*If solid food is investigated, make a mixture of the sample using peptone water before inoculating.

INTERPRETATION OF RESULTS

Propionibacteria produce brown colonies larger than 1 mm in diameter. Further methods based on chemotaxonomy and colony morphology should be used to identify propionibacteria as well as detection of propionic acid production by gas chromatography or HPLC.

STORAGE AND TRANSPORT CONDITIONS

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for *in vitro* diagnostic use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

- Malik, A.C., Reinbold, G.W., Vedamuthu, E.R. (1968) Evaluation of the taxonomy of the Propionibacterium. Can. J. Microbiol. 14(11):1185-1191.
- Thierry, A., Madec M.N. (1995) Propionibacteria count in raw milk. Lait. 75 (4-5):315-323.
- Atlas, R.M. (2010) Handbook of Microbiological Media, Fourth Edition. CRC Press.



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PRODUCT SPECIFICATIONS

NAME

YEAST EXTRACT SODIUM LACTATE MEDIUM

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
610363	500 g	500 g of powder in plastic bottle

pH OF THE MEDIUM

7.0 ± 0.2

USE

YEAST EXTRACT SODIUM LACTATE MEDIUM is used for the cultivation and enumeration of propionibacteria from food (milk and dairy products) and clinical specimens (human skin)

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: yellow

Ready-to-use medium

Appearance: slightly opalescent

Colour: dark amber

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 10-100 CFU/ml
Incubation Conditions: 6-14 days at 30-35°C, in anaerobiosis

Microorganism

Propionibacterium shermanii

ATCC® 9641

Growth








Good

Propionibacterium acnes

ATCC® 11827

Good

TABLE OF SYMBOLS

LOT	Batch code	IVD	<i>In vitro</i> Diagnostic Medical Device		Manufacturer		Use by		Fragile, handle with care
REF	Catalogue number		Temperature limitation		Contains sufficient for <n> tests		Caution, consult instructions for use		Do not reuse



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