

Technical Data

Baird Staphylococcus Enrichment Broth Base

M1091

Intended Use:

Recommended for selective enrichment of pathogenic Staphylococci from food, clinical and non-clinical samples.

Composition**

Ingredients	g/L
Peptone	8.000
Yeast extract	1.000
Tryptone	2.000
HM extract#	5.000
Sodium pyruvate	10.000
Glycine	12.000
Lithium chloride	5.000
Final pH (at 25°C)	6.6 ± 0.2

^{**}Formula adjusted, standardized to suit performance parameters

Directions

Suspend 43.0 grams in 990 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense 9.9 ml in test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to less than 45°C and aseptically add 0.1 ml of PTe 1% Selective Supplement (1 ml per vial) (FD052). Mix well and dispense into sterile tubes or flasks as desired.

Principle And Interpretation

Baird Staphylococcus Enrichment Broth Base is developed from the tellurite glycine formulation of Zebovitz et al (1) for enrichment of pathogenic *Staphylococcus*. Peptone, Tryptone, HM extract and yeast extract are sources of nitrogen, carbon, sulphur and vitamins. Sodium pyruvate not only protects injured cells and helps recovery but also stimulates *Staphylococcus aureus* growth without destroying selectivity. Lithium chloride and potassium tellurite inhibit most of the contaminating microflora except *Staphylococcus aureus*. Glycine, pyruvate enhances growth of *Staphylococcus*.

Type of specimen

Clinical samples - Skin lession scrapings; Food samples; Water samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (4).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (5). 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 specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations:

1. Further biochemical tests must be performed for confirmation.

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

Colour and Clarity of prepared medium

Light yellow coloured clear solution in tubes

[#] Equivalent to Meat extract

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Reaction

Reaction of 4.3 % w/v aqueous solution at 25°C. pH: 6.6±0.2

pН

6.40-6.80

Cultural Response

Cultural characteristics observed with added 0.1ml PTe 1% Selective Supplement (1 ml per vial), after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth
** Bacillus spizizenii ATCC 6633 (00003*)	50-100	none - poor
Escherichia coli ATCC 25922 (00013*)	50-100	none - poor
Proteus mirabilis ATCC 25933	50-100	good
Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)	50-100	good-luxuriant

Key: *Corresponding WDCM numbers. **Formerly known as Bacillus subtilis subsp. spizizenii

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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

- 1. Zebovitz E, Evans J B and Niver CF, 1955 J. Bact, 70: 686..
- 2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 3. 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.
- 4. 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.
- 5. Lipps WC, Braun-Howland EB, Baxter TE,eds. Standard methods for the Examination of Water and Wastewater, 24th ed. Washington DC:APHA Press; 2023.

Revision: 04/2024



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In vitro diagnostic medical device



Storage temperature



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





Do not use if package is damaged

Disclaimer:

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