

Baird Parker (BP) agar

Cat No: **111018**

Intended Use

Baird Parker Agar is a selective and differential medium primarily used for the isolation and enumeration of *Staphylococcus aureus* from clinical, food, and environmental samples. The medium contains ingredients such as lithium chloride and tellurite that inhibit the growth of most competing bacteria, allowing selective recovery of *Staphylococcus* species. Additionally, the presence of egg yolk emulsion enables the detection of lecithinase activity, which appears as clear zones around colonies, and the reduction of tellurite results in black or gray colonies, helping to differentiate *S. aureus* from other staphylococci and microbes. Baird Parker Agar is widely employed in diagnostic and food safety laboratories to identify and monitor *Staphylococcus aureus*, an important pathogen and common cause of foodborne illness.

Principle

Tryptone, beef extract, and yeast extract supply nitrogen, vitamins, minerals, and amino acids necessary for microbial growth. Lithium chloride, trypsin inhibitor, and potassium tellurite act to suppress competing flora, while glycine and sodium pyruvate promote the growth of staphylococci. Bacteriological agar serves as the solidifying agent.

Storage

Recommended storage conditions: 2 to 8 °C. Store in cool dry place
 Recommended shipping conditions: 2 to 8 °C.

Production Standard

The formulation is prepared according to the recommendations of the current European, United States, and China Pharmacopoeia.

Precautions

1. The product may secrete water when exposed to temperature changes between low and room temperature, which is normal. Allow it to reach room temperature before use and, if possible, pre-dry it in a sterile drying oven.
2. Handle the plates with sterile gloves to prevent contamination during use.
3. Store the plates in a cool, dry place away from direct sunlight to maintain their integrity.
4. Avoid opening the plates until they are ready to be used in the sampling area to prevent airborne contamination.
5. Ensure the plates are used within their expiration date to guarantee accurate results.
6. Dispose of used plates according to biohazard waste protocols to prevent contamination and ensure safety.

Quality Control

The following were incubated at 37°C for 24-48 hours. The results are as follows:

Test Strains	Expected Results	Characteristic Reaction
<i>Staphylococcus aureus</i> ATCC 6538	Good growth	Black or grey colonies with clear halo (egg yolk clearing reaction)
<i>Staphylococcus aureus</i> ATCC 25923	Good growth	Black or grey colonies with clear halo (egg yolk clearing reaction)
<i>Staphylococcus epidermidis</i> ATCC 12228	Good growth	Black or grey colonies without egg yolk clearing reaction
<i>Escherichia coli</i> ATCC 25922	Total inhibition (0)	N/A

Product Content

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Baird Parker (BP) agar	111018	10 plates/bag; 200 plates/case

Composition

Tryptone (Pancreatic digest of casein)	10.0 g
Beef extract	5.0 g
Yeast extract	1.0 g
Glycine	12.0 g
Lithium chloride	5.0 g
Sodium pyruvate	10.0 g
Bacteriological agar	20.0 g
Water	950 mL
Potassium Tellurite Egg-Yolk Emulsion	50 mL
Final pH (at 25 °C)	7.2 ± 0.2

Shelf Life

Shelf life: 3 months from date of manufacture

Packaging

90mm x 10 plates per bag; 200 plates/case

Each plate filled with 20mL ± 2mL

Disposal

Please adhere to the respective regulations for the disposal of used culture medium (e.g., autoclave for 30 minutes at 121 °C)

References

1. ISO 5944:2001 Standard. Milk and Milk based products - Detection of coagulase positive staphylococci - MPN Technique
2. ISO 6888-1:1999/Adm.2:2018. Standard. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of coagulase-positive staphylococci (*Staphylococcus aureus* and other species)- Part 1 Technique using Baird-Parker Agar medium. Adment 2: Inclusion of an alternative confirmation test using RPFA stab method.
3. ISO 6888-2:1999 Standard. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of coagulase positive staphylococci - Part 1 Technique using rabbit plasma fibrinogen agar medium. Geneva.
4. ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
5. ISO 22718 Standard (2015) . Cosmetics - Microbiology - Detection of *Staphylococcus aureus*.

Specially manufactured for:

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