BACGro™ Culture Media

GOLD STANDARD DIAGNOSTICS

Baird-Parker Agar Base - Instructions for Use

Intended Use

BAC*Gro*™ Baird-Parker Agar Base, supplemented with Egg Yolk Tellurite Enrichment, is intended for the selective isolation and enumeration of *Staphylococcus aureus* from food products and other materials. Baird-Parker Agar Base is not intended for use in diagnosis, treatment, or prevention of disease in humans.

Product Summary

The Baird-Parker Agar Base is used as a selective enumeration medium for *Staphylococcus aureus.* It is adopted by AOAC International as an Official Method of Analysis[1] for *S. aureus*.

The combination of peptone, yeast extract, and beef extract provide nitrogen, carbon, and trace vitamins and minerals to support the growth *S. aureus*. The inclusion of sodium pyruvate further supports the growth on *S. aureus* in the presence of selective agents. The egg yolk additive produces a halo around strains of *S. aureus* owing to the production of lecithinase, allowing for differentiation from other species of *Staphylococcus.* The inclusion of glycine and lithium chloride provide selectivity against other organisms, including Gram negative and other Gram positive bacteria. The addition of tellurite in the Egg Yolk Tellurite enrichment provides further specificity, and also results in a black color for *S. aureus* colonies.

Formulation (per Liter)*

Casein Peptone	10.0 g
Yeast Extract	1.0 g
Beef Extract	5.0 g
Sodium Pyruvate	10.0 g
Glycine	12.0 g
Lithium Chloride	5.0 g
Agar	20 g
Total	63 g/L

*Formula may be supplemented and/or adjusted as required to meet performance criteria

Directions

1. Add 63 g of Baird Parker Agar Base powder to 1 L of deionized water.
2. Heat and agitate. Bring to boil to completely dissolve
3. Autoclave at 121 degrees Celsius for 15 minutes.
4. Cool to 45-50°C.
5. Add 50mL Egg Yolk Tellurite Enrichment (30% egg yolk suspension containing potassium tellurite at 0.15%)
6. Mix well. Aseptically add to sterile Petri dishes.

Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BAC*Gro*™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Light beige, homogenous, free flowing powder, free of debris

Appearance (prepared): Yellow, opalescent, with no precipitate or debris

pH (prepared): 6.8 – 7.2 at 25°C

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	
Staphylococcus aureus (ATCC® 6538)	≤100 CFU	18 – 50 hr.	37° C	Aerobic	Growth, Black colonies, Clear halo
Staphylococcus aureus (ATCC® 25923)	≤100 CFU	18 – 50 hr.	37° C	Aerobic	Growth, Black colonies, Clear halo

Staphylococcus epidermidis (ATCC® 12228)	1,000 – 10,000 CFU	18 – 50 hr.	37° C	Aerobic	Growth, Black colonies, No halo
Staphylococcus saprophyticus (ATCC® 15305)	1,000 – 10,000 CFU	18 – 50 hr.	37° C	Aerobic	Growth, Black colonies, No halo
Escherichia coli (ATCC® 8739)	>10,000 CFU	18 – 50 hr.	37° C	Aerobic	No Growth
Escherichia coli (ATCC® 25922)	>10,000 CFU	18 – 50 hr.	37° C	Aerobic	No Growth

Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some strains may be encountered that grow poorly in this medium.

The formation of a halo around black colonies, or "egg yolk positive" colonies, does not guarantee a *S. aureus* identification. Use other microbiological, biochemical, and serological identification mechanisms to confirm.

Storage and Expiration

BAC*Gro*™ Baird-Parker Agar Base should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

Catalog Numbers

DCM2601 – Baird-Parker Agar Base, 500g
DCM2605 – Baird-Parker Agar Base, 5kg
DCM2610 – Baird-Parker Agar Base, 10kg

[1] Horwitz (ed.). 2000. Official methods of analysis of AOAC International. 17th ed., vol. 1. AOAC International, Gaithersburg, MD.

Revision History:

Revision	Description	Effective Date
03	Updated incubation time from 24 – 48 hr. to 18 – 50 hr. to match ISO 11133	13-MAR-2024
02	Changed incubation time to 24 – 48 hours, as per QC	16-JAN-2023
01	Document creation	08-APR-2020