

Wilson Blair Agar w/ BG

Intended Use

Wilson Blair Agar w/ Brilliant Green is recommended for the isolation and preliminary identification of *Salmonella Typhi* from clinical specimens.

Summary

Wilson and Blair Agar was formulated by Wilson and Blair for isolating *Salmonella* species especially *Salmonella* serotype *Typhi* from clinical specimens.

Principle

Peptic digest of animal tissue and beef extract provide nitrogenous, carbonaceous compounds and other growth nutrients. Brilliant green dye inhibits all Gram-positive bacteria. Dextrose is the fermentable carbohydrate. Ferrous sulphate is an indicator of H₂S production. Bismuth is a heavy metal which is inhibitory to most Gram-negative enteric bacilli other than *Salmonella*. Ferrous sulphate is reduced by *Salmonella* species in presence of bismuth sulphite and dextrose to form iron sulphide, indicated by black coloured colonies.

Formula*

Ingredients	g/L
Beef Extract	5.0
Peptic Digest of Animal Tissue	10.0
Dextrose	5.0
Disodium Hydrogen Phosphate	4.0
Ferrous Sulphate	0.3
Bismuth Sulphite Indicator	8.0
Brilliant Green	0.025
Agar	20.0
Final pH (at 25°C)	7.7 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 52.32 g of the powder in 1000 mL purified / distilled water.
2. Heat gently with frequent agitation until the powder is dissolved completely.
3. DO NOT AUTOCLAVE.
4. Cool to 45°C-50°C.
5. Mix well to disperse precipitate and pour thick plates (25 mL medium per plates).
6. Dry the plates before use, avoiding over drying.

Quality Control

Dehydrated Appearance: Greenish yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Light yellow to greyish green coloured, slightly opalescent gel forms in petridishes.

Cultural Response: Cultural characteristics observed after an incubation of 40-48 hours at 30°C-35°C.

Organism (ATCC)	Growth	Colour of Colony
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhi</i> (NTCC 786)	Good	Black with sheen
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	Good	Black with sheen
<i>Proteus mirabilis</i> (25933)	Good	Green
<i>Escherichia coli</i> (25922)	Inhibited	-

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Wilson and Blair, 1929, J. Pathol. Bacteriol., 29: 310.
2. MacFaddin J., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
201230020100	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
