ARENA BioScien

Block 5, Street 9 inside The Ismailia free zone. Ismailia- Egypt
Post Code-41511
Tel.-Fax: +202 21813500/ +202 21813600
Mob.: +2 01211550941/ +2 01119225860
E-mail: sales@arenabioscientific.com
Website: www.arenabioscien.com

BRILLIANT GREEN BROTH

Brilliant Green Broth is used as a selective differential medium for primary screening of Salmonella in polluted water using membrane filter technique.

REF: BS.1/GN01.100.0100	100 Gram	REF: BS.1/GN01.250.0250	250 Gram
REF: BS.1/GN01.500.0500	500 Gram		

CLINICAL SIGNIFICANCE

Salmonella is a gram-negative, facultatively anaerobic, non-sporulating, rod in the family Enterobacteriaceae . They are widely distributed in animals affecting mainly the stomach and the intestines. These organisms are difficult to differentiate biochemically from Escherichia coli . Geldreich and Jeter (1) developed membrane screening technique. Kabler and Clark (2) applied M-Brilliant Green Broth for primary screening of Salmonella in polluted water. This selective differential medium is a modification of Brilliant Green Agar without agar in double strength (3). Salmonella are unable to ferment either lactose or saccharose in the medium. This allows identification of accompanying weakly lactose-positive or lactosenegative, but saccharose positive microorganisms

METHOD PRINCIPLE

Proteose peptone and yeast extract in the medium are sources of carbon, nitrogen, vitamins and minerals. Lactose and saccharose are the carbon and energy sources. Sodium chloride provides essential ions. Phenol red is the pH indicator. Brilliant green inhibits gram-positive and most of the gram-negative bacteria except Salmonella .

MEDIA COMPOSITION

Item	Formula per liter of medium
- Peptone	20.00 gm
- Yeast extract	6.000 gm
- Lactose	20.00 gm
- Saccharose	20.00 gm
- Sodium chloride	10.00 gm
- Phenol red	0.160 gm
- Brilliant green	0.025 gm

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Respect country requirement for waste disposal.
  S56: dispose of this material and its container at hazardous or special waste collection point.
  S57: use appropriate container to avoid environmental contamination.
  S61: avoid release in environment.

For further information, refer to the BRILLIANT GREEN BILE BROTH Material safety datasheet.

EQUIPMENT REQUIRED NOT PROVIDED

- Screw capped Tubes
- Sterile Test tubes
- Incubator
- Autoclave

STORAGE AND STABILITY

BioScien BRILLIANT GREEN BROTH should be stored between 10-30°C in a firmlyclosed 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 avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature andsources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

PREPARATION

1. Suspend 76.19 grams in 1000 ml distilled water.
2. Heat if necessary to dissolve the medium completely.
3. DO NOT AUTOCLAVE.
4. Cool to 35°C and saturate sterile absorbent cotton pad with 2 ml of the broth.
5. The medium should be used within 24 hours of rehydration..

Deterioration

The color of ***BioScien*** BRILLIANT GREEN BROTH is Light yellow to pink homogeneous free flowing powder. Prepared medium is greenish brown coloured clear to slightly opalescent solution If there are any physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

SPECIMEN

Food and dairy samples; water samples

PERFORMANCE CHARACTERISTICS

Oranism	Growth	Colony color on memberane
Escherichia coli ATCC 25922	none-poo	yellowish green
Salmonella Typhi ATCC 6539	poor-fair	reddish pink
Salmonella Typhimurium ATCC 14028	good-luxuriant	pinkish white
Salmonella Enteritidis ATCC 13076	good-luxuriant	pinkish white
Staphylococcus aureus ATCC 25923	Inhibited	-

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positiveand negative control included in each run. If control values are foundoutside the defined range, check the system performance. If controlstill out of range please contact ***BioScien*** technical support.

REFERENCES

1. Geldreich E. E. and Jeter M. L., 1952, Bact. Proc. SAB, Boston, P.33.
2. Kabler P. W. and Clark H. F., 1952, American J. Publ. Hlth., 42:390.
3. Kauffmann F., 1935, Z. Hyg. Infektionskr., 117:26.

SYMBOLS IN PRODUCT LABELLING			
IVD	For in-vitro diagnostic use	Σ	Number of <n> test in the pack
LOT	Batch Code/Lot number	⚠	Caution
REF	Catalogue Number		Do not use if package is damaged
	Temperature Limitation		Consult Instruction for use
	Expiration Date		
	Manufactured by		