

GN BROTH (HAJNA)

Ready to use tubes

INTENDED USE

Ready to use liquid medium for the enrichment of Gram-negative microorganisms, especially *Salmonella* and *Shigella*.

TYPICAL FORMULA (g/l)

Tryptose	20.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	4.0
Potassium Dihydrogen Phosphate	1.5
Sodium Citrate	5.0
Sodium Desoxycholate	0.5
Mannitol	2.0
Dextrose	1.0

Final pH 7.3 ± 0.1

DESCRIPTION

GN Broth is prepared according to the formula proposed by Hajna. The medium is recommended for the enrichment of Gram-negative microorganisms from clinical and non-clinical samples.

The presence of the phosphate buffer and two fermentable carbohydrates, with a mannitol concentration twice that of glucose, allows for a poor growth of *Proteus* and *Pseudomonas* in samples where *Salmonella* and *Shigella* are present. Inhibitory chemicals in the medium allow normal fecal flora to be maintained in a prolonged lag phase. The medium is particularly recommended for the promotion of *Shigella* and *Salmonella* which are less inhibited and enter a lag or stimulated phase of growth during the first few hours of incubation..

TECHNIQUE

1. Place 1 g of faeces or 1 ml of liquid stool in tube. Swab specimens may be inserted directly into the broth. Emulsify the specimen thoroughly.
2. Incubate aerobically for 6 to 8 hours at 35°C
3. Place one or two drops of incubated broth onto selective plate media.
4. Incubate aerobically at 35°C and examine for pathogens after 18-24 hours.

LIMITATIONS

Because of a low concentration of sodium desoxycholate, GN Broth is partially inhibitory for *E.coli* and coliform bacteria; extended incubation is not recommended because these organisms may overgrow

STORAGE

Store at 2-8° away from direct light - When stored as directed the tubed media remain stable until the expiry date shown on the label. Do not use beyond stated expiry date. Media should not be used if there are any signs of deterioration or contamination.

PRECAUTIONS

For *in vitro* diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilize all biohazard waste before disposal.

References

- Hajna, A.A. (1955 Pub. Hlth. Lab. **13**, 83.
- NCCLS document M22-A2, 1996. Quality Assurance for Commercially prepared Microbiological Culture Media-Second Ed.; Approved Standard

Packaging

551524 GN Broth (Hajna), 20 x 10 ml, ready to use tubes