



TODD HEWITT BROTH

TM 451

INTENDED USE

For cultivation of group A haemolytic Streptococci used for serological studies

COMPOSITION

| Ingredients | Gms/Ltr. |
|--------------------------------|-----------------|
| Beef heart, infusion from | 500.000 |
| Peptic digest of animal tissue | 20.000 |
| Sodium carbonate | 2.500 |
| Dextrose | 2.000 |
| Sodium chloride | 2.000 |
| Disodium phosphate | 0.400 |

PRODUCT SUMMARY AND EXPLANATION

Todd Hewitt Broth, which was initially developed to produce streptococcal haemolysin was further modified by Updyke and Nickle for cultivation of beta-haemolytic streptococci for different serological tests. This medium is also recommended for selective isolation of group B streptococci with added gentamicin and nalidixic acid. This medium has been recommended as an alternative type in epidemiologic studies of groups A streptococci as well as pathogenic microorganisms.

PRINCIPLE

Todd Hewitt Broth medium is very nutritious due to the presence of peptic digest of animal tissue and beef heart infusion. Dextrose stimulates haemolysin production. The medium is well buffered by sodium phosphate and sodium carbonate to neutralize the acid produced during dextrose fermentation. This restricts destruction of antigenic streptococcal haemolysin. It is also found that sodium phosphate have a stimulating effect on the pneumococcal growth. Todd Hewitt Broth can be employed as an alternative to serum broth or horse flesh digest broth for the cultivation of streptococci prior to serological typing.

INSTRUCTION FOR USE

1. Dissolve 37 grams in 1000 ml distilled water.
2. Mix well and dispense as desired.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.



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QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow colour, homogeneous free flowing powder

Appearance of prepared medium: Medium amber colour, clear solution

pH (at 25°C): 7.8 ± 0.2

INTERPRETATION:

Culture characteristics observed after incubation period of 18 - 48 hours at 35 ± 2°C.

| Microorganisms | ATCC | Inoculum (CFU) | Growth |
|---------------------------------|-------|----------------|------------------|
| <i>Neisseria meningitidis</i> | 13090 | 50-100 | Good - Luxuriant |
| <i>Streptococcus pneumoniae</i> | 6303 | 50-100 | Good - Luxuriant |
| <i>Streptococcus pyogenes</i> | 19615 | 50-100 | Good - Luxuriant |
| <i>Enterococcus faecalis</i> | 29212 | 50-100 | Good - Luxuriant |
| <i>Staphylococcus aureus</i> | 25923 | 50-100 | Good - Luxuriant |

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

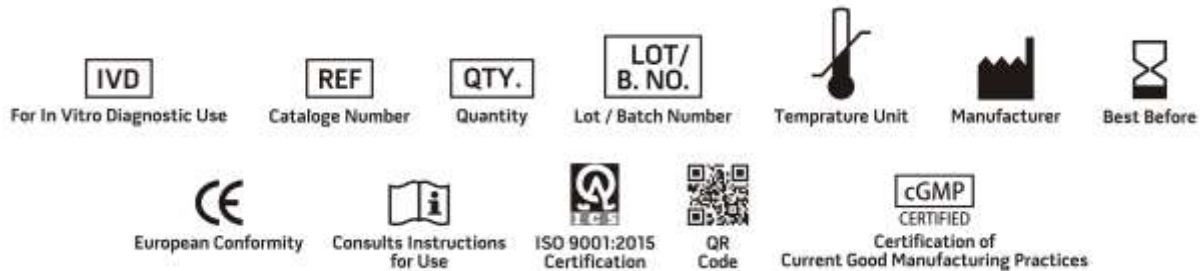
REFERENCES

1. Todd E. W. and Hewitt L. F., 1932, J. Pathol. Bacteriol., 35:973.
2. Updyke E. L. and Nickle M. I., 1954, Appl. Microbiol., 2:117.
3. Forbes B. A., Sahm D. F. and Weissfeld A. S., 1998, Bailey & Scotts Diagnostic Microbiology, 10th Ed., Mosby, Inc., St. Louis, Mo.



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PRODUCT DATA SHEET



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.