

TODD-HEWITT MEDIA

PRODUCTS:

Tube Media:^a

Todd-Hewitt Broth, item no. T7661, T7662

^asee catalog for ordering options

PURPOSE:

Todd-Hewitt Broth is a nutrient medium used for the cultivation of pathogenic microorganisms. It is primarily used for the cultivation of streptococci before serotyping, especially group A streptococci.

PRINCIPLE:

Updyke and Nickle⁴ modified the original medium described by Todd and Hewitt³ and found that the dehydrated modification was equivalent to the fresh infusion broth originally described. Moody and other investigators² found Todd-Hewitt Broth effective in growing strains of streptococci for antigen detection. Todd-Hewitt Broth enhances the production of type specific M protein surface antigen which makes it a good growth medium prior to fluorescent antibody grouping or prior to a variety of extraction procedures.¹

FORMULAS:

Approximate, per liter of deionized filtered water.

Todd-Hewitt Broth:

Yeast Supplemented Peptone	20.0 g
Beef Heart Infusion	3.1
Dextrose	2.0
Sodium Chloride	2.0
Disodium Phosphate	0.4
Sodium Carbonate	2.5
Final pH 7.8 ± 0.2 at 25°C	

PRECAUTIONS:*

For in vitro diagnostic use. Observe approved biohazard precautions.

Storage: Upon receipt store at 2-8°C away from direct light. Media should not be used if there are signs of contamination, deterioration (evaporation or discoloration), or if the expiration date has passed.

Limitation: Todd-Hewitt Broth is a nonselective medium; biochemical and/or serologic testing is necessary for further identification of microbes.

PROCEDURES:*

Specimen Collection: Information on specimen collection is found in standard reference material. In general, specimens should be protected from extremes of heat and cold and should be delivered to the laboratory without delay.

Method of Use for Todd-Hewitt Broth: Prior to inoculation, the medium should be brought to room temperature before inoculation. Inoculate the broth with microorganisms to be extracted or inoculate directly from a swab; remove the swab from the broth to prevent absorption. Incubate aerobically at 35°C for 2-5 hours for the fluorescent antibody procedure or 16-24 hours for the extraction procedures.¹ Perform procedures as directed.

Materials Required but Not Provided: Standard microbiological supplies and equipment such as loops, needles, incubator, incinerator, and staining reagents are not provided.

QUALITY CONTROL:*

Microorganisms Used (ATCC #):

Streptococcus pyogenes (19615)

Enterococcus faecalis (29212)

Expected Results:

Growth

Growth

User Quality Control: Check for contamination and deterioration.

BIBLIOGRAPHY:

1. Facklam, R. R., "Isolation and Identification of Streptococci," Centers for Disease Control, USHEW, Atlanta, 1980.
2. Moody, M. D, et al., *Am. J. Publ. Health*, 53:1083, 1963.
3. Todd, E. W., and L. F. Hewitt, *J. Pathol. Bacteriol.*, 35:973, 1932.
4. Updyke, E., and M. I. Nickle, *Appl. Microbiol.*, 2:117, 1954.

* For more detailed information, consult appropriate references and/or details in the preface of the PML Technical Manual.

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