

VIRAL TRANSPORT MEDIUM

Intended Use

Viral Transport Medium is intended for the collection and transport of clinical specimens containing viruses, chlamydiae, mycoplasmas or ureaplasmas.

Summary and Principle

Micropress® Viral Transport Medium consists of Modified Hank's Balanced Salt Solution supplemented with bovine serum albumin, sucrose, cysteine, gelatin, and glutamic acid. The HEPES buffer protects pathogens that are sensitive to pH changes in the medium. Phenol red is added as a pH indicator. The medium contains cryoprotectants such as sucrose to ensure viability of organisms through freezing and thawing. Antimicrobial agents are incorporated to minimize commensal bacterial and fungal contamination. The medium is isotonic and non-toxic to host cells.

The successful diagnosis of viral infections by culture is enhanced when the specimen contains as much virus as possible upon collection, is protected from thermal inactivation, and is contained in an effective transport system. Micropress® Viral Transport Medium is an ideal viral transport medium which possesses characteristics such as, preservation of the activity of the virus even at room temperatures, is nontoxic and has a long shelf life.

The kit includes universal transport medium that is room temperature stable and can sustain viability of a plurality of organisms that include clinically significant viruses, chlamydiae, mycoplasmas and ureaplasmas, during transit to the testing laboratories.

Reagent

Micropress® Viral Transport Medium contains the following components,

Hank's Balanced Salts
Bovine Serum Albumin
Sucrose
L-Cysteine
Gelatin
HEPES Buffer
L-Glutamic Acid
Vancomycin
Amphotericin
B Colistin
Phenol Red
pH 7.3 ± 0.2 at 25 °C

Storage and Stability

Store at 2 - 25 °C. Do not freeze or incubate. Keep the reagents away from direct sunlight. The shelf life of the reagents is as per the expiry date mentioned on the reagent vial labels. Do not use beyond expiry date.

Additional Material Required

Standard microbiological supplies and equipment such as loops, incinerators, incubators, centrifuge, Pasteur pipettes, cell cultures media, etc., as well as serological and biological reagents.

Specimen Collection and Preparation

- Once a swab specimen is collected it should be placed immediately into the Viral Transport Media tube.
- Transport the specimen to the laboratory as soon as possible, to maintain optimum viability.
- It is recommended to refrigerate the specimen during transit at 2 – 8 °C to ensure best recovery.
- If there will be a long delay before processing, specimens should be frozen at -70 °C or cooler and transported on dry ice, to prevent loss of infectivity.
- All specimen should be processed as soon as they are received in the laboratory.
- Specimens for viral, chlamydial, mycoplasmal and ureaplasma investigation should be collected and handled following the standard guidelines.

Procedure

Proper collection of the specimen increases the probability of successful isolation and identification of the infectious organisms. Specimens should be collected as soon as possible after the clinical onset of disease. Highest viral titers are present during the acute illness

1. Peel open the sealed pouch pack and remove one swab from the pouch
2. Collect the specimen without bending the swab.
3. Aseptically remove the cap from the tube.
4. Insert the swab into the vial containing the medium.
5. Break the swab shaft by bending the swab against the rim of the tube at the breakpoint.
6. Replace the cap and secure the lid, tightly.
7. Record the patient's information on the label.
8. Ship the specimen tube to the laboratory for analysis.

Quality Control

All lots of Microexpress® Viral Transport Medium are tested for microbial contamination, pH of the medium and ability to maintain viability of selected microbial agents of clinical significance.

Appearance: Red coloured, clear solution in tubes.

Final pH at 25 °C: 7.3 ± 0.3

Volume: 3.0 mL - 3.4 mL

Sterility: No growth is observed after 14 days of incubation at 30°C - 35°C in Fluid Thioglycollate Medium and at 20°C - 25°C in Soyabean Casein Digest Medium.

Interpretation of Results

Accuracy of culture results depends on proper specimen collection, transportation time and temperature as well as specimen handling in the testing laboratory.

Limitations

1. Condition, timing and volume of specimen collected for culture are significant variables in obtaining reliable culture results. Follow recommended guidelines for specimen collection.
2. Repeated freezing and thawing of specimens may reduce the recovery of viable organisms.
3. Dacron, or rayon, tipped swabs are recommended.
4. Calcium alginate or cotton swabs, as well as wooden stick swab, should not be used.

Precautions

1. This product is for in vitro Diagnostic use only and to be used by trained and qualified professionals.
2. Read the instructions carefully before performing the test.
3. All laboratory specimens should be considered infectious and handled according to standard precautions.
4. Follow State, Local and Institutional guidelines for handling and disposal of Biohazard waste.
5. Do not ingest, inhale, or allow to come into contact with skin.
6. Do not pre-moisten the applicator before use.
7. Do not re-sterilize the swab. Also, do not use if the swab is damaged or broken.
8. Do not use if the medium is contaminated.
9. All specimens should be shipped in compliance with all the Local, State and hospital guidelines.

Reference

1. Clinical and Laboratory Standards Institute. 2005. Approved Guideline M29-A3. Protection of laboratory workers from occupationally acquired infections, 3rd ed. CLSI, Wayne, Pa.
2. Anderson, N.L., et al. Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory, Coordinating ed., A.S. Weissfeld. American Society for Microbiology, Washington, D.C.
3. Jorgensen., et al. Manual of Clinical Microbiology, American Society for Microbiology, Washington, D.C.
4. Tille, P., et al. Bailey and Scott's Diagnostic Microbiology, C.V. Mosby Company, St. Louis, MO.
5. Clyde, W.A., et al. 1984. Cumitech 19; Laboratory Diagnosis of Chlamydial and Mycoplasmal Infections, Coordinating ed., W.L. Drew. American Society for Microbiology, Washington D.C.
6. Isenberg, H.D. Clinical Microbiology Procedures Handbook, Vol. I, II & III. American Society for Microbiology, Washington, D.C.

6. Murray, P.R., E. J. Baron, J. H. Jorgensen, M. A. Pfaller, and R. H. Tenen. 2003. Manual of Clinical microbiology. 8th ed. ASM, Washington.
7. Isenberg, H. D., 2004. Clinical microbiology procedures handbook, 2nd ed. ASM, Washington, DC.
8. Data on File: Microexpress®, Division of Tulip Diagnostics (P) Ltd.

Product Presentation

Cat No.	Product	Pack Size
203220100050	Viral Transport Kit I Kit consists of 3 mL of Viral Transport Medium and sterile Nasopharyngeal swab, recommended for collection and transport of viruses.	50 Tests
203220110050	Viral Transport Kit II Kit consists of 3 mL of Viral Transport Medium and sterile polyester swab, recommended for collection and transport of viruses.	50 Tests
203220190050	Viral Transport Kit III Kit consists of 3 mL of Viral Transport Medium and sterile Nasopharyngeal + Throat swab, recommended for collection and transport of viruses.	50 Tests
203220120050	Viral Transport Medium Recommended for collection and transport of viruses.	50 Tests

 Temperature Limit	 Manufacturer	 Catalogue Number	 Date of Manufacture	 Contains sufficient for <n> tests
 Use-by Date	 Consult Instructions for use	 Batch Code	 This way up	

Revision: 1025/VER-03

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.