

Viral Transport Medium (Inactivated or Non-inactivated)

VTM set for the collection and transport of clinical specimens containing viruses from the collection site to the testing laboratory.

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 REF:BS.1/VT50.001.0050

REF:BS.1/MT25.003.0025
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CLINICAL SIGNIFICANCE

Liquid media represent valuable systems to transport viruses in active form to the laboratory for isolation, especially when collection of the specimen on a swab is appropriate. Dermal, nasopharyngeal, cervical, and urethral specimens fall into this category. Relatively high titers of virus particles are collected in these specimens. The material from the swab is dispersed into the liquid medium. The medium is recommended by CDC and WHO for collection and transport of Coronavirus.

METHOD PRINCIPLE

Viral agents vary widely in composition, stability, structure, morphology, and size. The loosely packaged enveloped viruses obtained from human samples are generally more labile than the non-enveloped dense viruses.

Because they are labile to the environmental conditions, the viability of these viruses must be protected by using different solutions. Transport media are prepared with the idea of providing appropriate conditions of temperature, pH, and nutrients.

Transport media are prepared with the idea of sustaining the viability of the viral culture or specimens for tests like the nucleic acid amplification test (NAAT) while preventing the drying of the sample.

KIT COMPOSITION

	Composition	
Inactivated	Guanidine thiocyanate Hank's Balanced Salts Bovine Serum Albumin L-Cysteine Gelatin Sucrose L-Glutamic acid	N-lauroylsarcosine HEPES Buffer Antibacterial Antifungal Colistin Phenol Red PH 7.3 ± 0.2 @ 25 °C
Non-inactivated	Hank's Balanced Salts Bovine Serum Albumin L-Cysteine Gelatin Sucrose L-Glutamic acid	HEPES Buffer Antibacterial Antifungal Colistin Phenol Red PH 7.3 ± 0.2 @ 25 °C
Accessories required but not included	Flocked flexible breakable swab(nasal or nasopharyngeal)	

PRECAUTIONS AND WARNINGS

Observe approved biohazard precautions and aseptic techniques. To be handled by entitled and professionally educated person.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- 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.
- All specimens and materials used to process them should be considered potentially infectious and handled in a manner which prevents infection of laboratory personnel. Sterilize all biohazard waste including specimens, containers and media after their use.

For further information, refer to the VTM material safety data sheet.

REAGENT PREPARATION, STORAGE AND STABILITY

BioScien VTM is ready-to-use and is stable until expiration date. VTM, UTM or MTM should be stored at 2-8°C before sample collection and 2-8°C after sample collection.

Deterioration

The **BioScien** VTM is light orange-red color, clear solution. Do not use the product if there is change in the color of the medium, there is evidence of leakage, the swab pouch is open or there are other signs of deterioration.

SPECIMEN COLLECTION AND PRESERVATION

Samples for research on viruses, chlamydia, mycoplasmas or ureaplasmas should be collected and handled following the reference manuals and guidelines.



Virus Sampling



Oral Sampling



Nasal Sampling

If there is going to be a long delay before they are processed, the samples should be frozen at -70°C or at a lower temperature and transported on dry ice.

MATERIALS REQUIRED NOT PROVIDED

- Tissue culture cell lines
- Tissue culture medium
- Incubation systems
- Reading equipment

ASSAY PROCEDURE

- 1- Open the pouch to remove the swab.
- 2- Specimen can be collected with the swab in the following manner:

-For Nasal specimen

- a) A nasal specimen is used to diagnose upper respiratory tract infections, such as whooping cough.
- b) Insert a small, soft-tipped swab into each nostril and twirl it a few times until it is covered in secretions. This may be a little uncomfortable but should not be painful.

-For Nasopharyngeal specimen

- a) Insert a small, soft-tipped swab into the nostrils and back to the nasopharynx.
- b) Twirl it a few times until it is covered in secretions. This may be a little uncomfortable but should not be painful.

-For Throat specimen

- a) A throat specimen is a commonly tested to diagnose infections in the throat. These infections can include strep throat, pneumonia, tonsillitis, whooping cough, meningitis, etc.
- b) Ask patient to open his/her mouth. Swab the back of throat near the tonsils thoroughly.

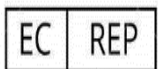
3- Transfer the swab into VTM Tube, label the samples and transport as specified.



REFERENCES

1. Centre for Disease Control and Prevention (CDC), 2020. 2019 Novel Coronavirus, Wuhan, China-Guidelines for Clinical specimens,
2. World Health Organization, 2020. Interim Guidance for Laboratory testing for 2019 novel coronavirus (2019-nCoV) in suspected human cases.
3. Murray, P.R., E.J. Baron, M.A.Pfaller, F.C. Tenover, and R.H. Tenover. 1999. Manual of Clinical Microbiology. 7th ed. ASM, Washington, D.C.
4. National Committee for Clinical Laboratory Standards (NCCLS). 2003. Quality Control of Microbiological Transport Systems. Approved Standard M40-A.
5. <https://www.nature.com/articles/nprot.2006.83>

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	



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