



**Polgen Swab/VTM Set** is a transport system used for the collection and transport of clinical samples for isolation of RNA that will be used in SARS-CoV-2 qRT-PCR detection.

**Background:**

Nasopharyngeal swabs are used for the detection of respiratory viruses such as RSV, influenza virus A & B, or parainfluenza virus. A properly collected viral swab is necessary for the detection of these organisms. Amplification of nucleic acids isolated from clinical samples by methods like polymerase chain reaction (PCR) is widely used for various purposes like detection of infectious agents, identification of their genotypes, identification of DNA sequences that lead to genetic diseases, drug resistance, etc. The sensitivity of these methods is very much dependent on the appropriate collection and transport of the samples.

**Polgen Swab/VTM Set** is prepared to enable obtaining nasopharyngeal samples and safely transporting them to the laboratory for further analyses.

**Polgen Swab/VTM Set** contains a “sterile Dacron swab” in a plastic package for collecting the sample and a “sterile viral transport medium” in a crack-proof plastic tube. Samples obtained with the swab is put in the Viral Transport Medium (VTM). Since RNA molecules are very susceptible to nuclease digestion that may be coming from degrading cells, it is recommended to transport the samples in an icebox and isolate nucleic acids within 4 hours.

**Storage Instructions:**

Unused swab/VTM sets can be stored at room temperature.

**General Safety Precautions:**

- Always wear masks and gloves when working with potentially biohazardous material.
- If spills of the contaminated material occur, disinfect with 2.5% hypo chloride solution.
- Pathogenic microorganisms including Hepatitis B virus and Human Immunodeficiency Virus (HIV)

- Pathogenic microorganisms including Hepatitis B virus and Human Immunodeficiency Virus (HIV) may be present in specimens. Universal precautions and local laboratory guidelines should be followed in handling all items contaminated with blood or body fluids. If a tube is leaking or is accidentally broken during collection or transport, use the established procedures in your facility for dealing with infectious spills. At a minimum, universal precautions should be employed.
- Tubes should be discarded in an appropriate manner according to biosafety principles.
- Never mouth pipette.

**Sample Collection**

1. Always wear appropriate personal protective equipment.
2. If the patient/resident has a lot of mucous in his/her nose, this can interfere with the collection of cells. Ask the patient/resident to use a tissue to gently clean out visible nasal mucous before a swab is taken.
3. Seat patient in a comfortable chair. It is best if the patient is placed in a high-fowler’s position in bed with the back of the head supported.
4. Enter the swab several centimeters with a slow, steady motion along the floor of the nose (straight back, not up the nose) until the posterior nasopharynx has been reached (distance from nostrils to the external opening of the ear).
5. Place a finger on the tip of the patient/ resident’s nose and depress slightly.
6. Once resistance is met (the swab should pass into the pharynx relatively easily), rotate the swab several times and withdraw the swab.
7. Break off top of the swab (it will snap off).
8. Without touching anywhere else, place the swab in the VTM containing tube.
9. Remove personal protective equipment, wash hands.
10. Ensure the specimen is labeled and transport to the laboratory.

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