
Lab Dept: Microbiology/Virology

Test Name: VARICELLA ZOSTER (VZV) PCR,
MISCELLANEOUS SITES

General Information

Lab Order Codes: VZVC

Synonyms: VZV PCR, Miscellaneous Sites; VZV Molecular Detection PCR

CPT Codes: 87798 – Infectious agent detection by nucleic acid, not otherwise specified, amplified probe technique

Test Includes: Varicella zoster reported as negative or positive. Applies to the following specimen types: body fluid; swab; genital swab; respiratory; tissue

Logistics

Test Indications: This test offers rapid (qualitative) detection of varicella-zoster virus DNA in clinical specimens for laboratory diagnosis of disease due to this virus.

Varicella-zoster virus (VZV) causes both varicella (chickenpox) and herpes zoster (shingles). VZV produces a generalized vesicular rash on the dermis (chickenpox) in normal children, usually before the age of 10 years. After primary infection with VZV, the virus persists in latent form and may emerge (usually in adults age 50 years and older) clinically to cause a unilateral vesicular eruption, generally in a dermatomal distribution (shingles).

This test should not be used to screen asymptomatic patients.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Clinic Laboratories (MML Test: VZVPV)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 4 days, performed Monday - Saturday

Special Instructions: Specimen must be collected under sterile conditions.

Specimen

Specimen Type: Body Fluid (spinal, pleural, peritoneal, ascites, pericardial, amniotic, or ocular); Swab (dermal, eye, nasal, or throat); Genital Swab (cervix, vagina, urethra, anal/rectal, or other genital sources); Respiratory (bronchial washing, bronchoalveolar lavage, nasopharyngeal aspirate or washing, sputum, or tracheal aspirate); Tissue (brain, colon, kidney, liver, lung, etc.)

Container:
Body Fluid: Sterile container
Swab: Multimicrobe media (M4-RT, M4, or M5) and ESwabs
Genital Swab: Multimicrobe media (M4-RT, M4, or M5) and ESwabs
Respiratory: Sterile container
Tissue: Multimicrobe media (M4-RT, M4, or M5) preferred or sterile container with 1 to 2 mL of sterile saline.

Draw Volume:
CSF/Ocular fluid: 0.5 mL (minimum: 0.3 mL)
Other Body Fluid: 0.5 mL (minimum: 0.5 mL)
Respiratory Specimen: 1.5 mL (minimum: 1 mL)
Swab: Entire collection
Tissue: Entire collection (2x2-mm biopsy)

Collection: Routine collection specific to specimen type

Special Processing: Lab Staff: Do not centrifuge. Send specimen refrigerated in a screw-capped sterile vial or other collection container specified above. Maintain sterility and forward promptly.

Specimen stable refrigerated (preferred) or frozen for 7 days.

Patient Preparation: None

Sample Rejection: Room temperature specimens; mislabeled or unlabeled specimens; calcium alginate-tipped swab, wood swab, or transport swab containing gel; formalin-fixed and/or paraffin-embedded tissues

Interpretive

Reference Range: Negative (Reference values apply to all ages)

Critical Values: As defined by reference lab

Limitations:

A negative result does not exclude the possibility of varicella-zoster virus (VZV) infection.

The reference range is typically “negative” for this assay. This assay is only to be used for patients with a clinical history and symptoms consistent with VZV infection and must be interpreted in the context of the clinical picture.

This test should not be used to screen asymptomatic patients.

Methodology:

Real-Time Polymerase Chain Reaction (PCR)/ DNA Probe Hybridization

References:

[Mayo Clinic Laboratories](#) November 2023

Updates:

3/6/2013: Title change and expansion to other specimen types, previously only spinal fluid.

1/26/2018: Expanded list of acceptable fluid types

10/31/2019: Updated dermal/eye/genital swabs to be sent in VTM on a temporary basis for specimen comparison saves.

12/20/2022: Testing transitions to a new performing laboratory within Mayo Clinic to streamline processes of molecular microbiology.

11/13/2023: Updated minimum volumes, added specimen stability.