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**Lab Dept:** Microbiology/Virology

**Test Name:** HERPES SIMPLEX (HSV) PCR, MISCELLANEOUS SITES

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***General Information***

**Lab Order Codes:** HSVP

**Synonyms:** Herpes Simplex Virus (HSV) DNA Detection by Polymerase Chain Reaction (PCR), Spinal Fluid; HSV Detection by Real-Time PCR; LightCycler HSV

**CPT Codes:** 87529 X2 - Infectious agent detection by nucleic acid (DNA or RNA); Herpes simplex virus, amplified probe technique

**Test Includes:** Real Time Polymerase Chain Reaction detection of Herpes Simplex Virus reported as negative or positive for type 1 DNA and type 2 DNA.

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***Logistics***

**Test Indications:** Useful for direct detection and differentiation of HSV1 and HSV2 DNA in various specimen types from asymptomatic patients. Aids in diagnosis of HSV infection in symptomatic patients.

**Lab Testing Sections:** Microbiology - Sendouts

**Referred to:** Mayo Medical Laboratories (MML Test: HERPV)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 – 3 day, set up Monday-Saturday

**Special Instructions:** There is a risk of a false-positive result due to contamination by target organisms or their nucleic acids, which may be introduced at the point of sample collection or testing. Every effort to minimize the risk of contamination should be taken.

It is suggested that samples collected for this test be submitted in a separate collection container from those submitted for other PCR tests.

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***Specimen***

**Specimen Type:** Body Fluids (other than blood and CSF), Respiratory Specimens, Throat, Tissue, Urine (<1 month old infant)

**Container:** **Body Fluids:** Sterile container

Culture transport swab images apply to Dermal/Ocular, Genital and Throat specimens. Detail below.

Collection Kits for throat swabs:



CHC# 32720 Specimen Collection Swab Cup

**Throat:** Flocked swab in VTM.

**Respiratory Specimens:** Screw-capped, sterile vial

**Tissue (Brain, Colon, Kidney, Liver, Lung, etc):** Screw-capped sterile vial with 1-2 mL of sterile saline or multi-microbe medium.

**Urine (<1 month old infant):** Sterile container

**Volume:** **Body Fluid:** 0.5 mL (Minimum: 0.3 mL)

**Respiratory Specimens:** 0.5 mL (Minimum: 0.3 mL)

**Urine (<1 month old infant):** 0.5 mL (Minimum: 0.3 mL)

<b>Collection:</b>	<p><b>Body Fluid:</b> Aseptic technique or puncture</p> <p><b>Throat:</b> Culture swab collection</p> <p><b>Respiratory Specimens</b> (Bronchial washing, bronchoalveolar lavage, nasopharyngeal aspirate or washing, sputum or trachial aspirate): Sterile container</p> <p><b>Tissue (Brain, Colon, Kidney, Liver, Lung, etc):</b> Tissue collection as determined by provider place in sterile screw-capped container with 1-2 mL of sterile saline or multi-microbe medium.</p> <p><b>Urine (&lt;1 month old infant):</b> Avoid contamination on collection</p>
<b>Special Processing:</b>	<p>Lab Staff: Specimen must be processed in a clean environment in which contamination of the specimen by HSV DNA is not likely. Send specimen refrigerated in a screw-capped, sterile vial or original collection container based on specimen type. Maintain sterility and forward promptly. Send refrigerated.</p> <p>Specimen stability: Refrigerated: 7 days</p>
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Improperly labeled or unlabeled specimen. Unacceptable specimen type. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded. Specimen collection on calcium alginate-tipped swab, wood swab, or transport swab containing gel; formalin fixed and/or paraffin-embedded tissue.

### ***Interpretive***

<b>Reference Range:</b>	Negative
<b>Significant Finding:</b>	Positive in eye
<b>Limitations:</b>	<ul style="list-style-type: none"> <li>• This test is not intended to be used for prenatal screening.</li> <li>• A negative result does not eliminate the possibility of herpes simplex virus (HSV) infection. There is a risk of a false-negative result due to improperly collected, transported, or handled swab samples.</li> <li>• There is a risk of a false-positive result due to contamination by target organisms or their nucleic acids, which may be introduced at the point of sample collection or testing. Every effort to minimize the risk of contamination should be taken.</li> <li>• The ARIES HSV-1 and -2 assay may not detect a coinfection of HSV-1 and HSV-2 in specimens where one of the 2 virus types is predominant.</li> </ul>

- The ARIES HSV-1 and -2 assay detects and differentiates between HSV-1 and HSV-2 only. It does not detect –any other herpes viruses (eg, cytomegalovirus [CMV], Epstein-Barr virus [EBV]). This assay does not distinguish between infectious HSV-1 or -2 and the presence of nucleic acid (ie, non-infectious viral particles).

- Results should be interpreted in conjunction with other clinical and laboratory findings.

**Methodology:** Real-Time Polymerase Chain Reaction (ARIES, Luminex Corp)

**References:** [Mayo Medical Laboratories Web Page](#) July 2019

**Updates:**  
12/15/2009: MML no longer will accept swab specimens submitted in transport medium. Specimens added for Tissue.  
6/25/2014: Whole blood specimen added for patients <1 month old.  
4/22/2015: Blood now orderable on separate test code.  
8/13/2015: Added images for culture transport swabs.  
9/15/2018: Method/CPT update at MML.  
5/15/2019: Updated to coordinate with inhouse test  
7/24/2019: Updated specimen collection info