Herpes Simplex Virus Type I and Type II Qualitative Real-time PCR

Herpes Simplex Virus (HSV), a DNA virus that can establish latency in ganglia, includes two biologically distinct serotypes, designated Type I and Type II (HSV-1 and HSV-2). HSV-1 primarily infects the oral mucosa, known as fever blisters. Its most serious manifestation is encephalitis in older children and adults. HSV-2 infection classically presents as herpes genitalis, characterized by extensive lesions in the genital area. The most serious complication of this form of infection is neonatal herpes, which is acquired during vaginal birth. The mortality rate of untreated disseminated HSV infection exceeds 70%. However, if treated early, the morbidity and mortality can be substantially reduced. Real-time PCR provides a rapid and sensitive method to determine the presence of target-specific amplifiable nucleic acids in all samples intended for PCR[1-3]. This assay detects both serotypes and distinguishes between them; results include both serotypes. For more information, call the lab at 513-636-9820.

Reporting Units:

Positive/Negative

Unacceptable Specimens:

- Frozen whole blood
- Swabs in gel or charcoal media

Shipping Conditions:

- Ambient if sent within 24 hours
- On cold packs if sent >24 hours after collection

Testing Schedule:

Testing for Herpes Simplex Virus is performed Mon-Fri on first and second shift and first shift on Sat-Sun. For testing outside of this schedule, call the lab at 513-636-9820. **TAT:** 1-2 days.

EPIC Test Code:

9059214

CPT Codes:

87529 x2

Contact Information:

Cincinnati Children's Division of Pathology
Molecular and Genomic Pathology Services (MGPS)
Phone: 513-636-9820
Fax: 513-517-7099
Email: pathology@cchmc.org
Website: cincinnatichildrens.org/pathology

For pricing or billing questions, call 513-636-4261.

Shipping Address:

Cincinnati Children's Hospital Medical Center
Attn: Molecular and Genomic Pathology Services (MGPS)
240 Albert Sabin Way, R2.001
Cincinnati, OH 45229

References:

1. Murray P, Baron E, Pfaller F, et al, eds. Manual of Clinical Microbiology. 7th ed. American Society of Microbiology Press, Washington D.C. 1999.
2. Espy M, Uhl J, Mitchell P, et al. Diagnosis of Herpes Simplex Virus infections in the clinical laboratory by Light Cycler PCR. *J Clin Microbiol.* 38:795-799. 2000.
3. Gilden D, Mahalingam R, Cohrs R, et al. Herpesvirus infections of the nervous system. *Nature Clin Practice.* 3:82-94. 2006.

Sample Type	Volume Needed	Collection Container
Anticoagulated Blood*	1mL	Lavender Top (EDTA)
Bone Marrow*	1mL	Lavender Top (EDTA)
Aspirate: endotracheal tube, tracheal	1mL	Sterile Container
Body Fluids (i.e. amniotic, pericardial, pleural, vitreous)	1mL	Sterile Container
Bronchoalveolar Lavage (BAL) fluid	1mL	Sterile Container
Cerebrospinal Fluid (CSF)	1mL	Sterile Container
Plasma*	1mL	Lavender Top (EDTA)
Serum	1mL	Gold Top (SST)
Stool	1mL or 0.3 g	Sterile Container
Swab**: conjunctival, labial, lesion, mouth, nasal, naso- pharyngeal, rectal, skin, throat, vaginal, vesicle, wound	n/a	Red or Green Culturette Swab
Tissue***	0.3 g	Sterile Container
Urine	1mL	Sterile Container

* EDTA is preferred, sodium heparin is acceptable.
** Red or green top culturette swabs preferred; viral transport media acceptable.
*** Wrap tissue in gauze wetted slightly with sterile saline to keep moist during transport.

Clinical Lab Index:
HSV QL: https://www.testmenu.com/cincinnatichildrens/Tests/662810