



Herpes Simplex Virus Type 1 and 2 Real-Time PCR (Qualitative)

Test Highlights

- This test exhibits a high sensitivity and specificity for the direct detection of HSV-1 and HSV-2.
- This test method uses an analyte specific reagent (ASR) and Real-time PCR test with test performance determined in verification/validation studies by DLS

Clinical Background

Herpes simplex virus can cause infection at many body sites (e.g. Oral-facial, genital, visceral, cutaneous, CNS and other sites). Disease can result from primary viral infection or as a result of reactivation of latent virus. Reactivation contributes to recurrent episodes of the disease. HSV-2 is the most common cause of genital infection, and it has become the most common sexually transmitted disease among women. HSV-1 is often associated with other disease states. HSV typing is often necessary for optimal treatment of infected neonates and immunocompromised individuals, adequate management of pregnant women, and effective STD counseling. PCR is considered the standard of care for HSV encephalitis because it is the most sensitive method available to detect HSV-1/HSV-2 in a variety of patient specimen types.

Order Indications

If clinically indicated, HSV-1 and HSV-2 real-time PCR is recommended if HSV infection is included on the differential diagnosis.

References

Espy, M. J., J. R. Uhl, P. S. Mitchell, J. N. Thorvilson, K. A. Svien, A. D. Wold, and T. F. Smith. 2000. *J Clin Microbiol* **38**:795-799.

Lakeman, F. D., and R. J. Whitley. 1995. National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group. *J Infect Dis* **171**:857-863.

Whitley, R. J., and F. Lakeman. 1995. *Clin Infect Dis* **20**:414-420.

Limitations

A negative test does not preclude HSV infection and should not be used as the sole basis for diagnosis, treatment or other management decisions. In a patient with HSV infection, the test may be negative due to the presence of HSV DNA in concentrations below the level of test detection. The result should always be interpreted in conjunction with patient clinical presentation, medical history and other appropriate clinical testing.

Methodology

Qualitative real-time PCR test methodology

Ordering Information

Test Name	Test Code
HSV-1/2 Real-time PCR	6256

Specimen Requirements – Handling and Transport

- Genital specimen swabs, tissue, body fluids, urine, respiratory specimens, cutaneous lesions (e.g. vesicle)
- Submit swabs in M4 and transport at 2-8 °C

Specimen Stability

Ambient temperature (21-27°C) for CSF at 3 days
Refrigerated (2-8°C) for up to 7 days
Frozen for up to 1 month

Testing Schedule

CSF – 7 days per week
Other specimens – Monday to Friday

CPT Code

87529 (x2)