The SLO Public Health Laboratory performs a molecular amplification test to detect Herpes simplex types 1, 2 virus (HSV 1 and HSV 2). The Hologic, Inc Aptima HSV 1 & 2 assay is a nucleic acid amplification test (NAAT) developed for use on the automated Panther system that utilizes target capture, transcription mediated amplification (TMA), and real-time detection of HSV-1, HSV-2, and an internal control (IC).

The Aptima HSV 1 & 2 assay amplifies and detects mRNAs for HSV-1 and HSV-2 (8). These RNAs are expressed from the viral genome during the infection cycle and are packaged inside HSV-1 and HSV-2 viral particles prior to virus release from infected cells (9). The assay, therefore, detects virus-infected cells and the mature virus particles themselves.

The Aptima HSV 1 & 2 assay detects and differentiates between HSV-1 and HSV-2 only. It does not detect or differentiate any other Herpes virus types and does not distinguish between infectious and non-infectious HSV-1 and HSV-2.

A negative Aptima HSV 1 & 2 assay result does not preclude a possible infection because results are dependent on adequate specimen collection. The assay results may be affected by improper specimen collection, technical error, clinical stage of the lesion sampled, or target levels below the assay limit of detection.

**Sensitivity**: HSV-1, sensitivity was 94.7% for STM specimen types. For HSV-2, sensitivity was 98.4% for STM specimen types.

**Specificity** HSV-1, 99.6% for STM specimen types For HSV-2, specificity was 92.8% for STM specimen types.

**Specimens**
The Aptima HSV 1 & 2 assay is used with swab specimens collected from male and female anogenital skin lesions and stored in the Aptima specimen transport media (STM). Once collected in STM specimens are stable for 60 days at ambient temperatures.

**Unacceptable specimens**
Specimens collected in viral transport medium must be immediately transferred to STM, VTM specimens will be rejected, CSF and Patient collected specimens

**CPT Code 87798**