

## HHV-6 Research Assays – not available in US commercial laboratories

<i><b>RESEARCH ASSAYS</b></i>		
Real-time RT-PCR, (mRNA)  <i>Whole blood</i>	<ul style="list-style-type: none"> <li>*Can determine active infection</li> <li>*Sensitive if special procedures are followed during collection</li> <li>*Quantitative</li> <li>*Can discriminate variant type (A vs. B)</li> </ul>	<ul style="list-style-type: none"> <li>*Labor intensive</li> <li>*Higher assay cost</li> <li>*Costly equipment required</li> </ul>
Antigenemia –  <i>Whole blood, Cells on slides</i>	<ul style="list-style-type: none"> <li>*Sensitive</li> <li>*Can determine active infection</li> <li>*Can identify variant type (A vs. B)</li> <li>*No cross-reaction</li> <li>*No expensive equipment required</li> </ul>	<ul style="list-style-type: none"> <li>*Labor intensive</li> <li>*Semi-quantitative</li> </ul>
Antibody capture with Electrochemiluminescence (ECL) readout  <i>Plasma</i>	<ul style="list-style-type: none"> <li>*Sensitive</li> <li>*Quantitative</li> <li>*High values suggest active infection</li> <li>*Automated</li> </ul>	<ul style="list-style-type: none"> <li>*Expensive equipment required</li> <li>*Sensitivity unknown</li> </ul>
LAMP  <i>Plasma or serum</i>	<ul style="list-style-type: none"> <li>*Can determine active infection</li> <li>*Can identify variant type (A vs. B)</li> <li>*Inexpensive compared to Q PCR</li> </ul>	<ul style="list-style-type: none"> <li>*Sensitivity unknown</li> <li>*Semi-quantitative</li> </ul>
Antibody avidity  <i>Serum</i>	<ul style="list-style-type: none"> <li>*Can differentiate between recent and past infection</li> <li>*Useful when no IgM is produced</li> </ul>	<ul style="list-style-type: none"> <li>*Labor intensive</li> <li>*Does not discriminate between A and B variants</li> <li>*Can't differentiate between chronic and latent infection</li> </ul>
Western blot	<ul style="list-style-type: none"> <li>*Can identify early and late viral antibodies</li> <li>*Sensitive</li> </ul>	<ul style="list-style-type: none"> <li>*Labor intensive</li> <li>*Impractical for routine testing</li> </ul>
IHC- Immunohistochemistry  <i>Biopsy material, slides</i>	<ul style="list-style-type: none"> <li>*Can differentiate between recent and past infection</li> <li>*Can identify variant type (A vs. B)</li> <li>*Sensitive</li> </ul>	<ul style="list-style-type: none"> <li>*Labor intensive</li> </ul>
PCR in –situ  <i>Biopsy sections</i>	<ul style="list-style-type: none"> <li>*Can differentiate between pathogenic and latent infection</li> <li>*Semi-quantitative</li> </ul>	<ul style="list-style-type: none"> <li>*Labor intensive</li> <li>*Lacks sensitivity</li> <li>*Not quantitative</li> </ul>