

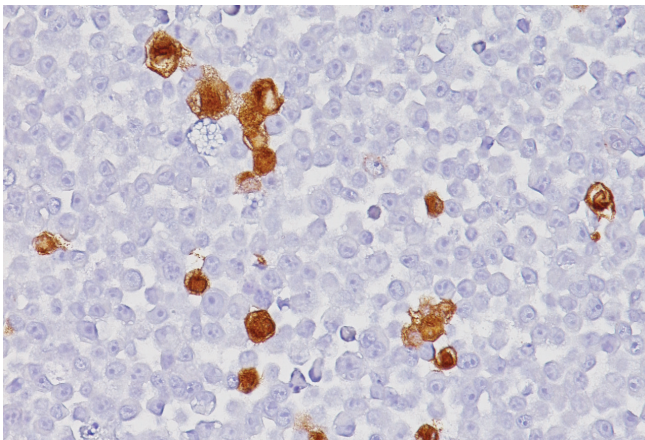
A Simple Solution to Identifying  
Herpes Simplex 1 & 2 through  
Immunohistochemistry

# A Simple Solution to Identifying Herpes Simplex 1 & 2 Through Immunohistochemistry Methods

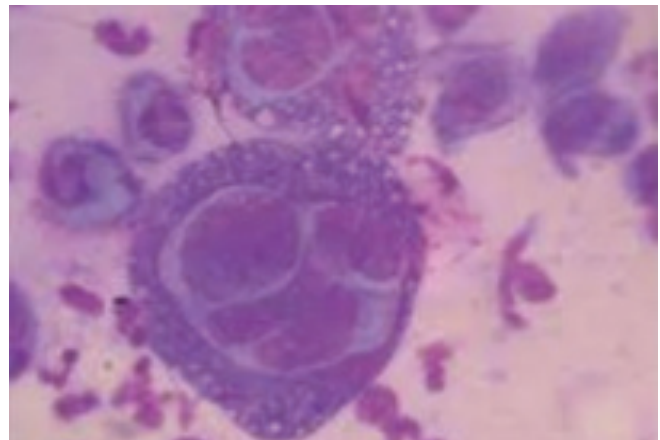
Herpes simplex virus types 1 and 2 (HSV-1 and HSV-2) are common, lifelong infections, which often have no symptoms<sup>1</sup>. People with symptoms may have painful blisters or sores at the site of infection<sup>2,3</sup>. The viruses are transmitted through contact with an infected person's lesion, mucosal surface, or genital or oral secretions. Traditionally, microbial identification in infectious diseases have been made primarily by using serologic assays and cultures, however, serologic results can be difficult to interpret in the setting of immunosuppression or when only a single sample is available for evaluation.<sup>4</sup> In addition, fresh tissue is not always available for culture and culture of fastidious pathogens can be difficult and may take weeks or months to yield results.<sup>4</sup> While some microorganisms have distinctive morphologic characteristics that allow their identification, in several instances it is difficult or even impossible to identify an infectious agent specifically by conventional morphologic methods.<sup>4</sup>

Immunohistochemistry is one of the most powerful techniques in surgical pathology. There has been an increasing interest in the use of specific antibodies to viral, bacterial, fungal, and parasitic antigens in the detection and identification of the causative agents in many infectious diseases. In many instances, immunohistochemistry has shown high specificity, allowing the differentiation of morphologically similar microorganisms.<sup>5</sup> The diagnosis of herpes simplex virus (HSV) infection can be difficult when the characteristic intranuclear inclusions or multinucleated cells, or both, are absent or when the amount of tissue in a biopsy specimen is small.<sup>6</sup> In these cases, immunohistochemistry using either polyclonal or monoclonal antibodies against HSV antigens has proven to be a sensitive and specific technique to diagnose HSV infections.<sup>6</sup>

Biocare Medical has recently re-released a polyclonal HSV I&II primary antibody cocktail that reacts with the major viral envelope glycoproteins and with core proteins. In addition, this antibody will not cross-react with cytomegalovirus, Epstein-Barr virus or varicella zoster virus. This product is compatible with FFPE tissue samples and can be utilized on automated IHC staining platforms or manual staining applications.



Herpes simplex infected tissue stained with HSV 1&2 (Biocare PP108AA)



HSV infection often exhibits multinucleation of a cell.<sup>7</sup>

To learn more about the HSV 1 & 2, please contact Biocare anytime at 800-799-9499 or click the link here:  
<https://biocare.net/product/herpes-simplex-virus-1-2-antibody/>

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