

## Antibody Datasheet

<b>Product Name:</b>	Mouse anti-Herpes Simplex virus gD
<b>Clone number:</b>	0197
<b>Isotype:</b>	Mouse IgG2a
<b>Product code:</b>	MAB12275
<b>Batch Number:</b>	
<b>Amount:</b>	0.1mg
<b>Concentration:</b>	1 mg/ml
<b>Buffer:</b>	Phosphate Buffered Saline pH7.2
<b>Preservative:</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Purification:</b>	The antibody was purified by affinity chromatography on protein A
<b>Specificity:</b>	This antibody is specific for Herpes Simplex virus glycoprotein D (gD).
<b>Applications:</b>	ELISA, IFA, Lateral flow. The antibody is suitable for use with clone 0195 (MAB12274) in lateral flow applications.
<b>Secondary reagents:</b>	Goat anti mouse IgG:HRP (PAB21441HRP)
<b>Antigen background:</b>	Human herpes simplex virus (HSV), also known as human herpes virus (HHV), is a large enveloped double stranded DNA virus that belongs to the <i>Herpesviridae</i> family, subfamily <i>Alphaherpesvirinae</i> . Human HSV exists as two distinct serotypes, herpes simplex virus type -1 (HSV-1) and type -2 (HSV-2). Both HSV-1 and HSV-2 are neurotrophic viruses that invade the central nervous system (CNS), where they replicate, and have the capacity to establish a latent infection ( <a href="#">Nicoll, MP et al</a> ). HSV entry into the host cell requires viral glycoproteins gB, gD, gH and gL. Glycoprotein D



(gD) is a structural component of the HSV envelope that has receptor binding activity and can bind specific proteins which mediate viral entry into the host cell.

HSV-1 and HSV-2 are primarily transmitted from human-to-human through contact with mucosal surfaces and damaged skin, which are common sites of primary HSV infection. However, the route and site of infection differs for each serotype with some reported overlap. Typically, HSV-1 is transmitted through oral-to-oral contact giving rise to infection in the lips, eyes and oropharyngeal mucosa but HSV-1 infection can also occur in the genital tract through oral-genital contact. HSV-2 tends to be sexually transmitted via contact with infected mucosa or damaged skin associated with the genital tract. In most cases, individuals infected with either HSV-1 or HSV-2 for the first time remain asymptomatic or present with painful blisters or ulcers at the site of infection.

HSV-1 establishes latency in the trigeminal ganglia, whereas HSV-2 tends to establish latency in the lumbar-sacral ganglia. Reactivation of either HSV-1 or HSV-2 can occur in immunosuppressed individuals or in seropositive individuals in response to a wide range of stimuli including periods of emotional and physical stress.

Both HSV-1 and HSV-2 are widespread, lifelong infections. Some symptoms of infection can be alleviated using antiviral medication but currently no prophylactic vaccine exists for either HSV-1 or HSV-2 ([WHO factsheet](#)).

**References:**

Nicoll, MP et al. (2012). The molecular basis of herpes simplex virus latency. *FEMS Microbiol Rev.*36(3): 684–705.

World Health Organisation – Herpes Simplex Virus factsheet

**Storage:**

Store at +4°C for up to three months, or at -20°C for longer.

The Antibody is shipped at ambient temperature.  
Avoid repeated freeze/thaw cycles.

