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## **Antibody Datasheet**

Product Name: Mouse anti Herpes simplex virus, type 2

Clone number: HSVA33

Isotype: Mouse IgG<sub>1</sub>

Product code: MAB12249-100

- **Batch Number:**
- Amount:
- Concentration: 1 mg/ml
- Buffer: Phosphate Buffered Saline pH7.4
- Preservative: 0.09% Sodium Azide (NaN<sub>3</sub>)

0.1mg

## **Purification:** The antibody was purified by affinity chromatography on protein A sepharose.

**Specificity:** This antibody is specific for Herpes simplex virus, type 2. The antibody recognises a 56-64kD band corresponding to glycoprotein D in immunoblotting of purified HSV, under reduced conditions, and a band of 120-140kD in immunoblotting of HSV-infected vero cell lysates under non-reduced conditions.

Applications: ELISA, WB.

Antigen background: Human herpes simplex virus (HSV), also known as human herpes virus (HHV), is a large enveloped double stranded DNA virus that belongs to the *Herpesviridae* family, subfamily *Alphaherpesvirinae*. 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 (<u>Nicoll, MP et al</u>).





|             | HSV-1 and HSV-2 are primarily transmitted from human-to-human through contact<br>with mucosal surfaces and damaged skin, which are common sites of primary HSV<br>infection. However, the route and site of infection differs for each serotype with<br>some reported overlap. Typically, HSV-1 is transmitted through oral-to-oral contact<br>giving rise to infection in the lips, eyes and oropharyngeal mucosa but HSV-1<br>infection can also occur in the genital tract through oral-genital contact. HSV-2 tends<br>to be sexually transmitted via contact with infected mucosa or damaged skin<br>associated with the genital tract. In most cases, individuals infected with either HSV-<br>1 or HSV-2 for the first time remain asymptomatic or present with painful blisters or<br>ulcers at the site of infection. |
|-------------|--|
|             | HSV-1 establishes latency in the trigeminal ganglia, whereas HSV-2 tends to establish<br>latency in the lumbar-sacral ganglia. Reactivation of either HSV-1 or HSV-2 can occur<br>in immunosuppressed individuals or in seropositive individuals in response to a wide<br>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 ( <u>WHO factsheet</u> ).   |
| References: | Nicoll, MP et al. (2012). The molecular basis of herpes simplex virus latency. FEMS<br>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 periods<br>The antibody is shipped at ambient temperature.<br>Avoid repeated freeze/thaw cycles.  |

