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Antibody Datasheet

Product Name: Mouse anti Cytomegalovirus glycoprotein H (gH)

Clone number: 0861

Isotype: Mouse IgG1

Product code: MAB12194-100

Batch Number:

Amount: 0.1mg

Concentration: 1 mg/ml

Buffer: Phosphate Buffered Saline pH7.2

Preservative: 0.09% Sodium Azide (NaN_3)

Purification: The antibody was purified by affinity chromatography on protein A

Specificity: This antibody is specific for Cytomegalovirus. The antibody recognises structural glycoprotein H (gH). The antibody does not react with Herpes Simplex virus or Varicella-zoster virus, Epstein-Barr virus or uninfected cells.

Applications: ELISA, IFA

Antigen background: Human Cytomegalovirus (HCMV) is an enveloped, double stranded DNA virus that belongs to the family *Herpesviridae*. The human CMV virus is ubiquitous and HCMV infection is globally widespread. The virus can be transmitted through direct contact with infected bodily fluids or though contact with virus infected transplant and transfusion material. Human CMV can also be transferred *in utero* from mother to foetus during pregnancy resulting in congenital HCMV infection of the newborn.

Individuals can be re-infected by the same strain or by a different strain of HCMV. Once infected the virus remains latent in an individual and may reactivate later in life.

In developed countries, 50 to 70% of all adults are thought to be HCMV sero-positive. Reports suggest that HCMV sero-prevalence increases with age, ethnicity, low socioeconomic status and sexuality.

In healthy adults and children, HCMV infection is self-limiting with most cases being asymptomatic or presenting with mild, non-specific or mononucleosis-like symptoms. However, HCMV can cause severe clinical disease in immunocompromised patients. Congenital HCMV infection can lead to birth defects such as blindness, deafness, mental impairment, epilepsy and microcephaly.

Human CMV has the largest genome of any known human virus. The HCMV genome encodes numerous glycoproteins including structural glycoproteins gB, gH, gL, gO, UL128, UL130 and UL131, which are conserved between members of the family *Herpesviridae*. Human CMV glycoproteins gB and gH/gL are important for viral entry into most host cells. Receptor-mediated viral entry into endothelial cells requires a functional gH pentameric complex (gH/gL/UL128/UL130/UL131), and this complex is one of the primary targets for antiviral antibodies in infected individuals.

References:

Burke HG, Heldwein EE. (2015). Crystal Structure of the Human Cytomegalovirus Glycoprotein B. PLoS Pathog. Oct 20;11(10):e1005227.

Storage:

Store at +4^{0}C for up to three months, or at -20^{0}C for longer.

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