

Anti-HHV-7 gH antibody, mouse monoclonal (clone 2)

65-210 100 µg

Storage temperature: Shipped at 4°C or -20°C, and store at -20°C.

Applications

- 1) Western blotting (1/500~1/1,000 dilution)
- 2) Immunoprecipitation (assay dependent)
- 3) Immunofluorescence staining and Immunocytochemistry (1/100~1/3,200 dilution)
- 4) ELISA (assay dependent)

Immunogen: His6-tagged recombinant gH of HHV-7 encoding 333-636 amino acids expressed in *E. coli*.

Specificity: Reacts with gH of HHV7.

Isotype: mouse IgG1 kappa

Product: Produced in serum-free medium and purified by proprietary chromatography procedure under mild conditions. 90~95% pure by SDS-PAGE.

Form: 1 mg/ml in PBS, 50% glycerol, filter sterilized. Azide- and carrier-free.

Background: **Human herpesvirus 7 (HHV-7)** is one of nine known members of the Herpesviridae family that infects humans. HHV-7 is a member of Betaherpesviridae, a subfamily of the Herpesviridae that also includes HHV-6 and cytomegalovirus (HHV-5 or HCMV). HHV-7 often acts together with HHV-6, and the viruses together are sometimes referred to by their genus, Roseolovirus. HHV-7 was first isolated in 1990 from CD4+ T cells taken from peripheral blood lymphocytes.

Both HHV-6B and HHV-7, as well as other viruses, can cause a skin condition in infants known as exanthema subitum, although HHV-7 causes the disease less frequently than HHV-6B. HHV-7 infection also leads to or is associated with a number of other symptoms, including acute febrile respiratory disease, fever, rash, vomiting, diarrhea, low lymphocyte counts, and febrile seizures, though most often no symptoms present at all.

Herpesviruses encode several glycoproteins that are targeted to the virion envelope. They play critical roles in viral infection, including attachment, penetration, cell-to-cell spread and the maturation of nascent viral particles. In human herpesviruses, envelope glycoprotein H (gH) associates with glycoprotein L (gL) to form a gH-gL complex, which is a key participant in fusion events critical to herpesvirus infection.

References: This antibody has been described in and used in the following publication... Sadaoka T, Yamanishi K, Mori Y. Human herpesvirus 7 U47 gene products are glycoproteins expressed in virions and associate with glycoprotein H. [J Gen Virol.](#) 2006 Mar;87(Pt 3):501-8. PMID: 16476971. **WB, IP, IF**

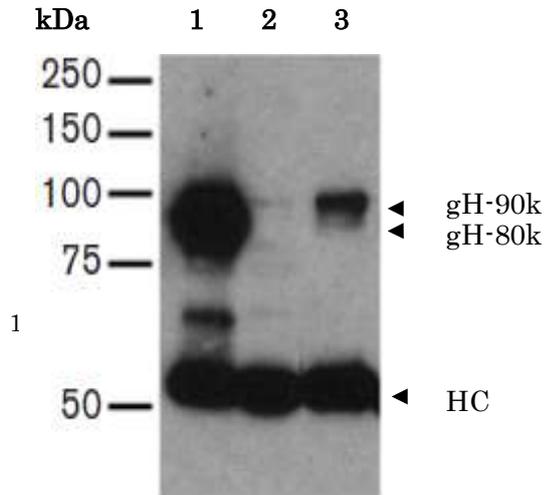


Fig.1. Immunoprecipitation of HHV7 gH in the lysate of HHV7 infected-SupT-1 cells.

Left lane: HHV7 infected SupT-1 cell lysate

Right lane: Mock Sup1 cell lysate

The antibody conjugated with agarose was used for immunoprecipitation and for western blotting, the antibody was used at 1/1,000 dilution.

gH-90 may be the precursor and gH-80, the mature form of gH glycoprotein.

HC is heavy chain of IgG.

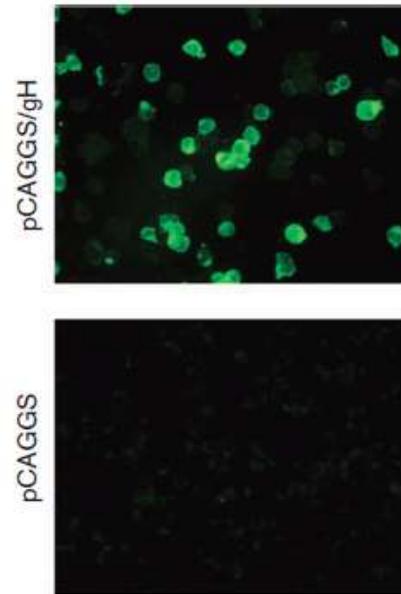


Fig.2. Immunofluorescence staining of gH protein in 293T cells transfected with gH expressing plasmid.

The plasmid pCAGGS/gH was transfected and two days later, the cells were harvested and fixed with methanol and stained with indirect immunofluorescence using this antibody and fluorescein-conjugated goat antibodies against mouse IgG.

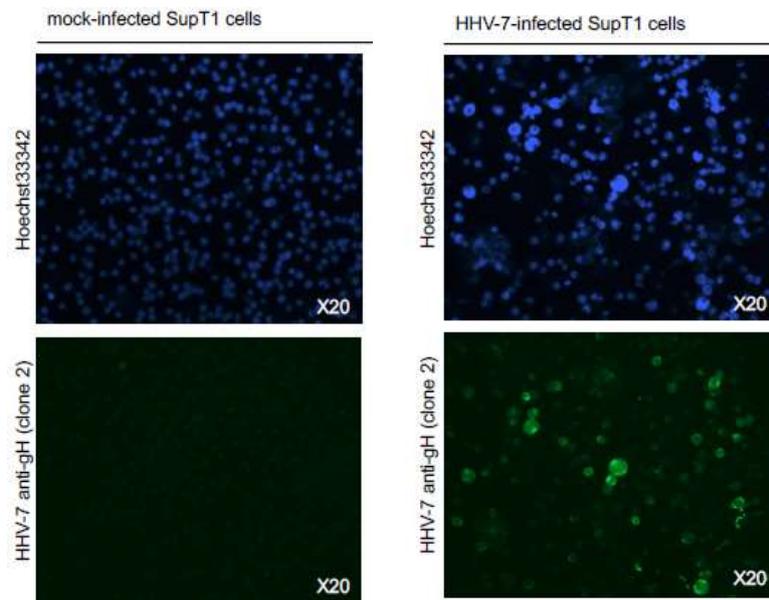


Fig.3. Immunofluorescence staining of gH protein in SupT1 cells infected with HHV-7

HHV-7 infected SupT1 cells (at 4 days post infection; cell-to-cell spreading)

Aceton/Methanol (70%/30%) fixation and permeabilization.

Anti-HHV-7 gH antibody at 1/100 dilution

Alexa Fluor 488 conjugated donkey anti-mouse IgG at 1/300

Hoechst33342 at 1/1,000 dilution