BACKGROUND

Cytomegalovirus (CMV) is a member of the herpes virus group which includes herpes simplex virus types 1 and 2; Varicella Zoster virus, which causes chicken pox; and Epstein Barr virus, which causes infectious mononucleosis. These viruses remain dormant within the body over a long period. In humans, CMV is known as HCMV or human herpesvirus 5 (HHV-5). HHV-5 causes only a brief mononucleosis-like malaise in immunocompetent adults, but may cause severe illness or death in immunosuppressed individuals. CMV immediate early (CMV IE) proteins are present during active CMV infection and they activate the extracellular matrix proteins Thrombospondin 1 and Thrombospondin 2. The CMV IE protein CMV pp86, also known as UL122, IE2 or IE86, interacts with another CMV IE protein CMV pp72 to stimulate the expression of HLA-G, a non-classical MHC class 1 molecule, during viral infection. The CMV IE promoter is activated by the inflammatory process proteins: tumor necrosis factor (TNFα), interleukin 1β (IL-1β), and interleukin 4 (IL-4).

REFERENCES


SOURCE

CMV pp86 (12E2) is a mouse monoclonal antibody raised against recombinant partial length pp86 of CMV origin.

PRODUCT

Each vial contains 200 µg IgG1 in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CMV pp86 (12E2) is recommended for detection of pp86 of CMV origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of CMV pp86: 86 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.