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

3. Margraf, S., et al. 2001. Antisense oligonucleotide ISIS 2922 targets IE2. Onno, M., et al. 2000. Modulation of HLA-G antigen expression by human CMV is known as HCMV or human herpesvirus 5 (HHV-5). H HV-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).

CMV pp86 (12E2): sc-69835

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CMV pp86 (12E2) is available conjugated to agarose (sc-69835 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-69835 HRP), 200 µg/ml, for WB, IHC/P and ELISA; to either phycoerythrin (sc-69835 PE), fluorescein (sc-69835 FITC), Alexa Fluor® 488 (sc-69835 AF488), Alexa Fluor® 546 (sc-69835 AF546), Alexa Fluor® 594 (sc-69835 AF594) or Alexa Fluor® 647 (sc-69835 AF647), 200 µg/ml, for WB (RGB), IF, IHC/P and FCM; and to either Alexa Fluor® 680 (sc-69835 AF680) or Alexa Fluor® 790 (sc-69835 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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 SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mating Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS


STORAGE

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

PROTOCOLS

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