BACKGROUND

The herpes simplex virus (HSV) (also known as cold sore, night fever, or fever blister) is a virus that causes a contagious disease. The HSV-1 strain generally appears in the orafacial organs. All herpes viruses are morphologically identical: they have a large double stranded DNA genome, and the virion consists of an icosahedral nucleocapsid which is surrounded by a lipid bilayer envelope. Following primary infection, the virus establishes a latent infection in the host and may reactivate at any stage. Reactivation is frequently, but not always, associated with further disease. ICP8, the HSV-1 encoded single-strand DNA (ssDNA)-binding protein, is the major DNA binding protein of HSV-1. ICP8 promotes single-stranded DNA to assemble into a homologous duplex plasmid producing a displacement loop. At higher concentrations, however, ICP8 facilitates the reverse reaction due to its helix destabilizing activity.

SOURCE

HSV-1 ICP8 (10A3) is a mouse monoclonal antibody raised against ICP8 purified from U-35-VERO cells.

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.

HSV-1 ICP8 (10A3) is available conjugated to agarose (sc-53329 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53329 HRP), 200 µg/ml, for WB, HRP and ELISA; to either phycoerythrin (sc-53329 PE), fluorescein (sc-53329 FITC), Alexa Fluor® 488 (sc-53329 AF488), Alexa Fluor® 546 (sc-53329 AF546), Alexa Fluor® 594 (sc-53329 AF594) or Alexa Fluor® 647 (sc-53329 AF647), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM; and to either Alexa Fluor® 680 (sc-53329 AF680) or Alexa Fluor® 790 (sc-53329 AF790), 200 µg/ml, with UltraCruz ® Mounting Medium: sc-24941 or UltraCruz ® Hard-set Mounting Medium: sc-359850.

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APPLICATIONS

HSV-1 ICP8 (10A3) is recommended for detection of HSV-1 ICP8 of herpes simplex virus 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 HSV-1 ICP8: 150 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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 Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

STORAGE

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

DATA

HSV1 ICP8 (10A3): sc-53329. Western blot analysis of HSV1 ICP8 expression in HSV1 strain 17 syn infected (A) and mock infected (B) baby hamster kidney tissue extracts.

SELECT PRODUCT CITATIONS