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 HSV1 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 HSV1 encoded single-strand DNA (ssDNA)-binding protein, is the major DNA binding protein of HSV1. 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

HSV1 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, (H)OP 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, for Western Blotting (RGB), IF, IHC(P) and FCM.

HSV-1 ICP8 (10A3) is recommended for detection of HSV1 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.

APPLICATIONS

HSV-1 ICP8 (10A3) is recommended for detection of HSV1 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).

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 A/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® 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


RESEARCH USE

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

PROTOCOLS

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