Hep B preS2 (S 26): sc-23944

BACKGROUND

Hep B (Hepatitis B) virus is a member of the Hepadnavirus family that causes an inflammation of the liver, vomiting, jaundice and, sometimes, death. Hep B is one of the smallest number of known non-retroviral viruses that replicate their genome using reverse transcription. The three major antigens that comprise the Hep B virus include: surface antigen (Hep B sAg, preS1/preS2), an envelope glycoprotein found as membranous aggregates in the sera of individuals infected with Hep B; e antigen (Hep B eAg), which is typically associated with much higher rates of viral replication; and core antigen (Hep B cAg), which encloses the viral genome and makes up the assembled and unassembled variants of the capsid protein. Hep B cAg and Hep B eAg are used primarily in Hep B diagnosis, whereas Hep B sAg is used for Hep B prevention in vaccines. Hep B viral antigens are primarily expressed in liver.

REFERENCES


SOURCE

Hep B preS2 (S 26) is a mouse monoclonal antibody raised against purified Hep B sAg isolated from a pool of sera of human origin.

PRODUCT

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

Hep B preS2 (S 26) is available conjugated to agarose (sc-23944 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23944 HRP), 200 µg/ml, for WB, IHC(PO) and ELISA; to either phycocyanin (sc-23944 PE), fluorescein (sc-23944 FITC), Alexa Fluor® 488 (sc-23944 AF488), Alexa Fluor® 546 (sc-23944 AF546), Alexa Fluor® 594 (sc-23944 AF594) or Alexa Fluor® 647 (sc-23944 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23944 AF680) or Alexa Fluor® 790 (sc-23944 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

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

APPLICATIONS

Hep B preS2 (S 26) is recommended for detection of an epitope corresponding to amino acids 132-137 of the preS2 region of Hep B 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Molecular Weight of Hep B preS2: 30 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

Hep B preS2 (S 26): sc-23944. Western blot analysis of Hep B preS2 expression in Hep B-transfected Huh 7 (A) and control (B) whole cell lysates. Image kindly provided by Jinhong Chang and John Taylor at Fox Chase Cancer Center.

Hep B preS2 (S 26): sc-23944. Immunofluorescence staining of human hepatoma cells (Huh7) transiently transfected with an HAd5Ag (Large, Middle and Small) expression cDNA clone. The positive cell shows a typical punctate cytoplasmic staining. Image kindly provided by Vadim Bichko, Idexx Pharmaceuticals.

SELECT PRODUCT CITATIONS


RESEARCH USE

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