**Hep B preS2 (S 26): sc-23944**

**BACKGROUND**

Hepatitis B virus (HBV) is a member of a member of the Hepadnavirus family that causes an inflammation of the liver, vomiting, jaundice and, sometimes, death. HBV is one of the small number of known non-retroviral viruses that replicate their genome using reverse transcription. The three major antigens that comprise the hepatitis B virus include: surface antigen (HBsAg, preS1/preS2), an envelope glycoprotein found as membranous aggregates in the sera of individuals infected with HBV; e antigen (HBeAg), which is typically associated with much higher rates of viral replication; and core antigen (HBCAg), which encloses the viral genome and makes up the assembled and un assembled variants of the capsid protein. HBCAg and HBeAg are used primarily in HBV diagnosis, whereas HBsAg is used for HBV prevention in vaccines. Hepatitis 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 IgG1 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(P) and ELISA; and to either phycoerythrin (sc-23944 PE), fluorescein (sc-23944 FITC), Alexa Fluor® 488 (sc-23944 AF488) or Alexa Fluor® 647 (sc-23944 AF647), 200 µg/ml, for IF, IHC(P) 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 10^6 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-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, 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).


**DATA**

Hep B preS2 (S 26): sc-23944. Western blot analysis Hep B preS2 expression in Hep B-transfected Huh 7 (A) and control (B) whole cell lysates. Image kindly provided by Jinhang 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 HBsAg (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.