

# Hep B preS2 (1898): sc-58143

## BACKGROUND

Hep B (Hepatitis B) virus is a member of a member of the Hepadnavirus family that causes an inflammation of the liver, vomiting, jaundice and, sometimes, death. Hep B 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 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

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5. Naumov, N.V., Antonov, K.A., Miska, S., Bichko, V., Williams, R. and Will, H. 1997. Differentiation of core gene products of the hepatitis B virus in infected liver tissue using monoclonal antibodies. *J. Med. Virol.* 53: 127-138.
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7. Park, J.H., Lee, M.K., Kim, H.S., Kim, K.L. and Cho, E.W. 2003. Targeted destruction of the polymerized human serum Albumin binding site within the preS2 region of the HBV surface antigen while retaining full immunogenicity for this epitope. *J. Viral Hepat.* 10: 70-79.

## SOURCE

Hep B preS2 (1898) is a mouse monoclonal antibody raised against Hep B.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Hep B preS2 (1898) 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) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Hep B preS2: 28 kDa.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **Hep B preS2 (S26): sc-23944** for Hep B preS2 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.