**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 small number of non-retroviral viruses that replicate their genome using reverse transcription. Three major antigens make up different parts of the Hep B Virus (HBV). These three include: surface antigen (Hep B sAg), an envelope glycoprotein found as membranous aggregates in the sera of infected HBV, and 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 HBV diagnosis, whereas Hep B sAg is used for HBV prevention in vaccines. Hep B viral antigens are primarily expressed in liver.

**REFERENCES**


**SOURCE**

Hep B cAg (10E11) is a mouse monoclonal antibody raised against denatured recombinant Hep B cAg.

**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 cAg (10E11) is available conjugated to agarose (sc-23947 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23947 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycoerythrin (sc-23947 PE), fluorescein (sc-23947 FITC), Alexa Fluor® 488 (sc-23947 AF488), Alexa Fluor® 546 (sc-23947 AF546), Alexa Fluor® 594 (sc-23947 AF594) or Alexa Fluor® 647 (sc-23947 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-23947 AF680) or Alexa Fluor® 790 (sc-23947 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**RESEARCH USE**

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

**APPLICATIONS**

Hep B cAg (10E11) is recommended for detection of an epitope corresponding to amino acids 8-20 of denatured core antigen of Hep B and Woodchuck hepatitis 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Hep B cAg: 21 kDa.

**STORAGE**

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

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