BACKGROUND
Hepatitis B virus (Hep B or HBV) infection can result in lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure and death. Hep B infection is also associated with a 100-fold increased risk of hepatocellular carcinoma and currently infects over 250 million people worldwide. Hep B has a partially double stranded 3.2 kilobase DNA genome which contains four open reading frames, one of which encodes a 154 amino acid protein called the HBx protein. Hepatitis B surface antigen (Hep B HBsAg) is a protein antigen produced by the hepatitis B virus. When in the blood, HBsAg is one of the earliest markers of infection with Hep B, appearing even before symptoms occur.

REFERENCES

SOURCE
Hep B HBsAg (S14) is a mouse monoclonal antibody raised against purified serum Hep B HBsAg.

PRODUCT
Each vial contains 100 µg IgG2b in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
Hep B HBsAg (S14) is recommended for detection of Hep B HBsAg of woodchuck origin by immunoprecipitation [1–2 µg per 100–500 µg of total protein [1 ml of cell lysate]], immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Hep B HBsAg: 28 kDa.

RECOMMENDED SECONDARY REAGENTS
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

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 or our catalog for detailed protocols and support products.