

## Anti-HBsAg [F124] Standard Size Ab00768-1.1

**Isotype and Format:** Mouse IgG1, Kappa

Clone Number: F124

Alternative Name(s) of Target: HBV M protein; Hepatitis B virus surface antigen; Hepatitis B surface

antigen; HBV surface antigen; HBV-sAg; Hepatitis B virus M protein; Major surface protein

**UniProt Accession Number of Target Protein: Q773S4** 

**Published Application(s):** NTRL, RIA, WB, ELISA **Published Species Reactivity:** Hepatitis B Virus

**Immunogen:** BALB/c mice were immunized by injection of HBV particles serotype ay, purified from HBsAgpositive patient blood sera. Splenocytes from immunized mice were then fused with the Sp2/0-Ag myeloma cell line.

**Specificity:** F124 was shown to react with an epitope within the pre-S2 region of the HBV surface antigen M protein, shown by Western blot and RIA using both full viral particles and HBsAg particles (Budkowska et al, 1986). F124 is also reactive against a synthetic peptide corresponding to the N-terminal residues 120-150 (FPAGGSSSGTVNPVLTTASPL) of the pre-S2 region (Ni et al, 2010). Hepatitis B is one of the most common infectious diseases on a global scale, with infection associated with both acute and chronic liver inflammation and implicated in up to half of all occurring hepatocellular carcinomas.

**Application Notes:** F124 was used as a solid-phase coating for RIAs detecting HBV particles, resulting in particle immobilisation by binding the pre-S2 epitope of the surface antigen (Budkowska et al, 1986). An scFv-formatted version of F124, comprising the same VH and VL sequences, showed dose-dependent binding to, and competitive blocking of IgG and Fab against, r-HBsAg in an ELISA (Passafiume et al, 1998). Size-exclusion HPLC indicates that, while the scFv monomer shows no tendency to aggregate at low concentrations, equilibrium is achieved at a monomer/dimer ratio of 3:1 at high protein concentrations.

**Antibody First Published in:** Budkowska et al. Monoclonal antibody recognizing pre-S(2) epitope of hepatitis B virus: characterization of pre-S(2) epitope and anti-pre-S(2) antibody. J Med Virol. 1986 Oct:20(2):111-25. PMID:2430050

**Note on publication:** Describes the original generation of this antibody and characterizes its specificity and functionality.

## **Product Form**

Size: 200 µg Purified antibody.

**Purification:** 

Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at  $4^{\circ}$ C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.