Hepatitis B Virus X Protein

CATALOG NUMBER: HBV-X-005P, 50 µg

Applications Western Blot, ELISA, antigen, etc.

Introduction Hepatitis B virus X protein (HBx) is a 17 kD transcriptional coactivator that plays a significant role in the regulation of genes involved in inflammation and cell survival. It regulates many transcription factors including nuclear factor kappa B (NF-kappaB) and plays a key role in hepatocarcinogenesis. rHBx facilitates the binding of cAMP response element binding protein (CREB) to its responsive element. rHBx stabilizes the cellular coactivator ASC-2 through direct protein-protein interaction, affecting the regulation of genes actively transcribed in liver cancer cells.

HBx transactivates both JNK and MAPK signal transduction pathways in association with the mobilization of cytosolic Ca2+. The communication between HBx and general transcription factor TFIIB is also one of the mechanisms which account for its transcriptional transactivation. HBx decreased the expression of PTEN a known tumor suppressor and a negative regulator of phosphatidylinositol 3'-kinase/AKT and HBx decreased the expression of PTEN in HBx-transfected cells.

The etiology of hepatocellular carcinoma (HCC) is involved with hepatitis B virus (HBV) infection and HBx in particular plays a role in the development of HBV-related HCC. The persistence of HBx is important to the pathogenesis of early HCC and HBx expression in the liver during chronic HBV infection may be an important prognostic marker for the development of HCC.

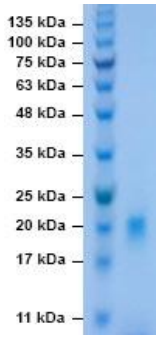
Description C-terminal 6x his tagged HBV X protein (aa 1-154) (GenBank Accession#: AAK81692)

Source *Escherichia Coli*

Storage Store at 4 °C but should be kept at -20 °C for long term storage. Non-hazardous.

Concentration 50 µg (1 mg/ml), sterile filtered in PBS with 8M urea.

Purity > 95% pure by 10% SDS-PAGE gel



SDS-PAGE: 6x his tagged recombinant HBV X protein (aa 1-154) purified from 293 cells

HBV X PROTEIN SEQUENCE:

MAARLCCQLDPARDVLCLRPVGAESRGRPVSGPFGPLPSPSFSAVPTAHGAHLSLRGLPVCAFSSAGPCALRFTSARRMETTV
NAHQVLPKVLHKRTLGLSAMSTTDLEAYFKDCLFKDWEELGEEIRLMIFVLGGCRHKLVCSPAPCNFFTSA*HHHHHH*

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