

## Recombinant HBV/Hepatitis B Virus Protein X

<b>Catalog No.</b>	CSI15719A CSI15719B CSI15719C	<b>Quantity:</b>	5 µg 25 µg 1.0 mg
<b>Description:</b>	<p>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. Recombinant HBx stabilizes the cellular coactivator ASC-2 through direct protein-protein interaction, affecting the regulation of genes actively transcribed in liver cancer cells.</p> <p>HBx transactivates both JNK and MAPK signal transduction pathways in association with the mobilization of cytosolic Ca<sup>2+</sup>. 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.</p> <p>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.</p>		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	17 kDa		
<b>Formulation:</b>	Sterile filtered and lyophilized from Liquid in 0.05 M Acetate buffer pH4.		
<b>Purity:</b>	Greater than 95% as determined by SDS-PAGE.		
<b>Specific Activity:</b>	The amino acid sequence of the recombinant HBx is 100% homologous to amino acid sequence of the native HBx.		
<b>Amino Acid Sequence:</b>	MAARVCCQLD PARDVLCLRP VGAESRGRPV SGPFGTLPSP SSSAVPADHG AHLRLRGLPV CAFSSAGPCA LRFTSARRME TTVNAHQVLP KVLHKRTLGL SAMSTTDLEA YFKDCLFKDW EELGEEIRLK VFVLGGCRHK LVCSPAPCNF FTSA.		
<b>Reconstitution:</b>	Add 0.1 M Acetate buffer pH4 to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited.		
<b>Storage &amp; Stability:</b>	Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.		
<b>Applications:</b>	Western blotting, ELISA.		

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