

Product datasheet for DP2011

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Hepatitis B X Protein / HBx Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, IP, WB

Recommended Dilution: ELISA.

(Titer is defined by Indirect ELISA, it is > 1/100,000 for antibody concentration 1 mg/ml, 25 ng of antigen are coated per well, and is then defined at a point of maximal decrease of the

titration curve).
Western blotting.

Immunoprecipitaion.

Reactivity: Hepatitis B Virus

Host: Rabbit

Clonality: Polyclonal

Immunogen: Recombinant Hepatitis B Protein X from E. coli.

Specificity: Highly specific for Hepatitis B Protein X.

Formulation: 0.05M Phosphate buffer, 0.1M NaCl, pH 7.2 without preservatives

State: Aff - Purified

State: Lyophilized purified IgG fraction

Reconstitution Method: Add 0.05 ml of deionized water and let the lyophilized pellet dissolve completely.

Slight turbidity may occur after reconstitution, which does not affect activity of the antibody.

In this case clarify the solution by centrifugation.

Purification: Immunoaffinity Chromatography on a column with immobilized recombinant Hepatitis B

Protein X

Conjugation: Unconjugated

Storage: Store lyophilized antibody at -20°C.

Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store

frozen at -80°C.

Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show

decline in activity after two weeks at 4°C.

Stability: Shelf life: one year from despatch.





Background:

The recombinant Hepatitis B Protein X is 100% homologous with the natural Hepatitis B Protein X. 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. HBx facilitates the binding of cAMP response element binding protein (CREB) to its responsive element. HBx 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.

Synonyms: HBV Protein X

Note: Calculated Molecular Weight: 17 kDa