

# RSF1 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20734c

## **Specification**

## RSF1 Blocking Peptide (C-term) - Product Information

**Primary Accession** 

**Q96T23** 

# RSF1 Blocking Peptide (C-term) - Additional Information

**Gene ID** 51773

#### **Other Names**

Remodeling and spacing factor 1, Rsf-1, HBV pX-associated protein 8, Hepatitis B virus X-associated protein, p325 subunit of RSF chromatin-remodeling complex, RSF1, HBXAP, XAP8

### Target/Specificity

The synthetic peptide sequence is selected from aa 1355-1369 of HUMAN RSF1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### RSF1 Blocking Peptide (C-term) - Protein Information

Name RSF1

Synonyms HBXAP, XAP8

## **Function**

Regulatory subunit of the ATP-dependent RSF-1 and RSF-5 ISWI chromatin-remodeling complexes, which form ordered nucleosome arrays on chromatin and facilitate access to DNA during DNA-templated processes such as DNA replication, transcription, and repair (PubMed:<a href="http://www.uniprot.org/citations/12972596" target="\_blank">12972596</a>, PubMed:<a href="http://www.uniprot.org/citations/28801535" target="\_blank">28801535</a>). Binds to core histones together with SMARCA5, and is required for the assembly of regular nucleosome arrays by the RSF-5 ISWI chromatin-remodeling complex (PubMed:<a

href="http://www.uniprot.org/citations/12972596" target="\_blank">12972596</a>). Directly stimulates the ATPase activity of SMARCA1 and SMARCA5 in the RSF-1 and RSF-5 ISWI chromatin-remodeling complexes, respectively (PubMed:<a

href="http://www.uniprot.org/citations/28801535" target="\_blank">28801535</a>). The RSF-1 ISWI chromatin remodeling complex has a lower ATP hydrolysis rate than the RSF-5 ISWI



chromatin-remodeling complex (PubMed:<a href="http://www.uniprot.org/citations/28801535" target="\_blank">28801535</a>). The complexes do not have the ability to slide mononucleosomes to the center of a DNA template (PubMed:<a

mononucleosomes to the center of a DNA template (PubMed:<a href="http://www.uniprot.org/citations/28801535" target="\_blank">28801535</a>). Facilitates transcription of hepatitis B virus (HBV) genes by the pX transcription activator. In case of infection by HBV, together with pX, it represses TNF-alpha induced NF-kappa-B transcription activation. Represses transcription when artificially recruited to chromatin by fusion to a heterogeneous DNA binding domain (PubMed:<a href="http://www.uniprot.org/citations/11944984" target="\_blank">11944984</a>, PubMed:<a href="http://www.uniprot.org/citations/11788598" target="\_blank">11788598</a>).

#### **Cellular Location**

Nucleus Note=Localization is diffuse during mitosis (PubMed:12972596). Co- localizes with SMARCA5 in the nucleus (PubMed:12972596)

#### **Tissue Location**

Ubiquitously expressed. Highly expressed in the heart, skeletal muscle, kidney and placenta (PubMed:12972596) Expressed at low levels in the brain and colon (PubMed:12972596)

## RSF1 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

#### • Blocking Peptides

RSF1 Blocking Peptide (C-term) - Images

## RSF1 Blocking Peptide (C-term) - Background

Required for assembly of regular nucleosome arrays by the RSF chromatin-remodeling complex. Facilitates transcription of hepatitis B virus (HBV) genes by the pX transcription activator. In case of infection by HBV, together with pX, it represses TNF- alpha induced NF-kappa-B transcription activation. Represses transcription when artificially recruited to chromatin by fusion to a heterogeneous DNA binding domain.

# RSF1 Blocking Peptide (C-term) - References

Shamay M., et al. Genomics 79:523-529(2002). Shamay M., et al. J. Biol. Chem. 277:9982-9988(2002). Taylor T.D., et al. Nature 440:497-500(2006).

Mao Y.M., et al. Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases.

Ota T., et al. Nat. Genet. 36:40-45(2004).