

SLBP Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP1931c

Specification

SLBP Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q14493</u>

SLBP Antibody (Center) Blocking Peptide - Additional Information

Gene ID 7884

Other Names Histone RNA hairpin-binding protein, Histone stem-loop-binding protein, SLBP, HBP

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1931c was selected from the Center region of human SLBP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SLBP Antibody (Center) Blocking Peptide - Protein Information

Name SLBP

Synonyms HBP

Function

RNA-binding protein involved in the histone pre-mRNA processing (PubMed:12588979, PubMed:19155325, PubMed:8957003, PubMed:9049306). Binds the stem-loop structure of replication-dependent histone pre-mRNAs and contributes to efficient 3'-end processing by stabilizing the complex between histone pre-mRNA and U7 small nuclear ribonucleoprotein (snRNP), via the histone downstream element (HDE) (PubMed:12588979, PubMed:12588979, PubMed:<a



href="http://www.uniprot.org/citations/8957003" target=" blank">8957003, PubMed:9049306). Plays an important role in targeting mature histone mRNA from the nucleus to the cytoplasm and to the translation machinery (PubMed: 12588979, PubMed:19155325, PubMed:8957003, PubMed:9049306). Stabilizes mature histone mRNA and could be involved in cell-cycle regulation of histone gene expression (PubMed:12588979, PubMed:19155325, PubMed:8957003, PubMed:9049306). Involved in the mechanism by which growing oocytes accumulate histone proteins that support early embryogenesis (By similarity). Binds to the 5' side of the stem-loop structure of histone pre-mRNAs (By similarity).

Cellular Location

Cytoplasm. Nucleus. Note=Polyribosome-associated (PubMed:12588979). Localizes predominantly in the nucleus at the G1/G2 phases and the beginning of S phase (PubMed:12588979). Through the S phase, partially redistributes to the cytoplasm (PubMed:12588979) Binding to histone mRNA is necessary for cytoplasmic localization (PubMed:12588979). Shuttles between the nucleus and the cytoplasm (PubMed:15829567). Imported in the nucleus by the Importin alpha/Importin beta receptor (PubMed:15829567)

Tissue Location Widely expressed..

SLBP Antibody (Center) Blocking Peptide - Protocols

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

• <u>Blocking Peptides</u> SLBP Antibody (Center) Blocking Peptide - Images

SLBP Antibody (Center) Blocking Peptide - Background

SLBP binds to the stem-loop structure in replication-dependent histone mRNAs. Histone mRNAs do not contain introns or polyadenylation signals, and are processed by endonucleolytic cleavage. The stem-loop structure is essential for efficient processing but this structure also controls the transport, translation and stability of histone mRNAs. Expression of SLBP is regulated during the cell cycle, increasing more than 10-fold during the latter part of G1.

SLBP Antibody (Center) Blocking Peptide - References

Zheng, L., et al., Mol. Cell. Biol. 23(5):1590-1601 (2003).Whitfield, M.L., et al., Mol. Cell. Biol. 20(12):4188-4198 (2000).Martin, F., et al., EMBO J. 16(4):769-778 (1997).Wang, Z.F., et al., Genes Dev. 10(23):3028-3040 (1996).McCombie, W.R., et al., Nat. Genet. 1(5):348-353 (1992).