

CTDSP2 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP8460a

Specification

CTDSP2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O14595
Other Accession O53ZR2

CTDSP2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10106

Other Names

Carboxy-terminal domain RNA polymerase II polypeptide A small phosphatase 2, Nuclear LIM interactor-interacting factor 2, NLI-interacting factor 2, Protein OS-4, Small C-terminal domain phosphatase 2, Small CTD phosphatase 2, SCP2, CTDSP2, NIF2, OS4, SCP2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8460a was selected from the N-term region of human CTDSP2. 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.

CTDSP2 Antibody (N-term) Blocking Peptide - Protein Information

Name CTDSP2

Synonyms NIF2, OS4, SCP2

Function

Preferentially catalyzes the dephosphorylation of 'Ser-5' within the tandem 7 residue repeats in the C-terminal domain (CTD) of the largest RNA polymerase II subunit POLR2A. Negatively regulates RNA polymerase II transcription, possibly by controlling the transition from initiation/capping to processive transcript elongation. Recruited by REST to neuronal genes that contain RE-1 elements, leading to neuronal gene silencing in non-neuronal cells. May contribute to the development of sarcomas.



Cellular Location Nucleus.

Tissue Location

Expression is restricted to non-neuronal tissues. Highest expression in pancreas and lowest in liver

CTDSP2 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

CTDSP2 Antibody (N-term) Blocking Peptide - Images

CTDSP2 Antibody (N-term) Blocking Peptide - Background

CTDSP2 is one of several small CTD phosphatases (SCP). It has been proposed that SCP activity is an evolutionarily conserved transcriptional regulator that acts globally to silence neuronal genes. In addition, expression of phosphatase CTDSP2 mRNA isenhanced in several cancer cell lines with amplification of the CTDSP2 and CDK4 genes, and CTDSP2 coamplifies with CDK4 in some primary sarcomas. CTDSP2 may contribute to the development of a subset of sarcomas.

CTDSP2 Antibody (N-term) Blocking Peptide - References

Yeo, M., et al., J. Biol. Chem. 278(28):26078-26085 (2003).Su, Y.A., et al., Oncogene 15(11):1289-1294 (1997).Beutler, E., et al., Blood Cells Mol. Dis. 21(3):207-216 (1995).Su, Y.A., et al., Proc. Natl. Acad. Sci. U.S.A. 91(19):9121-9125 (1994).Su, Y.A., et al., Oncogene 15, 1290-1294 (1997) (): ().