



Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP1922d

Specification

Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Other Accession Offiles

Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 10856

Other Names

RuvB-like 2, 48 kDa TATA box-binding protein-interacting protein, 48 kDa TBP-interacting protein, 51 kDa erythrocyte cytosolic protein, ECP-51, INO80 complex subunit J, Repressing pontin 52, Reptin 52, TIP49b, TIP60-associated protein 54-beta, TAP54-beta, RUVBL2, INO80J, TIP48, TIP49B

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1922d was selected from the C-term region of human RUVBL2. 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.

Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide - Background

This gene encodes the second human homologue of the bacterial RuvB gene. Bacterial RuvB protein is a DNA helicase essential for homologous recombination and DNA double-strand break repair. Functional analysis showed that this gene product has both ATPase and DNA helicase activities. This gene is physically linked to the CGB/LHB gene cluster on chromosome 19q13.3, and is very close (55 nt) to the LHB gene, in the opposite orientation.

Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide - References

Bauer, A., et al., EMBO J. 19(22):6121-6130 (2000).Parfait, B., et al., Ann. Genet. 43(2):69-74 (2000).Wood, M.A., et al., Mol. Cell 5(2):321-330 (2000).Salzer, U., et al., Biochim. Biophys. Acta 1446(3):365-370 (1999).Kanemaki, M., et al., J. Biol. Chem. 274(32):22437-22444 (1999).



Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide - Protein Information

Name RUVBL2

Synonyms INO80J, TIP48, TIP49B

Function

Possesses single-stranded DNA-stimulated ATPase and ATP- dependent DNA helicase (5' to 3') activity; hexamerization is thought to be critical for ATP hydrolysis and adjacent subunits in the ring-like structure contribute to the ATPase activity (PubMed:10428817, PubMed:17157868). Component of the NuA4 histone acetyltransferase complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (PubMed:14966270). This modification may both alter nucleosome -DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription (PubMed:14966270). This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair (PubMed:14966270). The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400 (PubMed:14966270). NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage (PubMed:14966270). Component of a SWR1-like complex that specifically mediates the removal of histone

H2A.Z/H2AZ1 from the nucleosome



(PubMed:24463511). Proposed core component of the chromatin remodeling INO80 complex which exhibits DNA- and nucleosome-activated ATPase activity and catalyzes ATP- dependent nucleosome sliding (PubMed:16230350, PubMed: tations/21303910" target=" blank">21303910). Plays an essential role in oncogenic transformation by MYC and also modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex (PubMed: 10882073, PubMed:16014379). May also inhibit the transcriptional activity of ATF2 (PubMed:11713276). Involved in the endoplasmic reticulum (ER)-associated degradation (ERAD) pathway where it negatively regulates expression of ER stress response genes (PubMed:25652260). May play a role in regulating the composition of the U5 snRNP complex (PubMed:<a href="http:/ /www.uniprot.org/citations/28561026"

Cellular Location

Nucleus matrix. Nucleus, nucleoplasm. Cytoplasm. Membrane. Dynein axonemal particle {ECO:0000250|UniProtKB:Q9DE27} Note=Mainly localized in the nucleus, associated with nuclear matrix or in the nuclear cytosol. Although it is also present in the cytoplasm and associated with the cell membranes

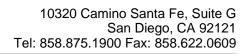
target=" blank">28561026).

Tissue Location

Ubiquitously expressed. Highly expressed in testis and thymus.

Reptin/TIP49B/RUVB2 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you





may find useful for product applications.

• Blocking Peptides