

Reptin/TIP49B/RUVB2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1922D

Specification

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

Application WB,E
Primary Accession Q9Y230

Other Accession <u>Q9DE27</u>, <u>Q9WTM5</u>,

Q2TBU9, Q6FIB9

Reactivity Human, Mouse Predicted Bovine, Xenopus

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Antigen Region 400-430

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

This Reptin/TIP49B/RUVB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 400-430 amino acids from the C-terminal region of human Reptin/TIP49B/RUVB2.

Dilution

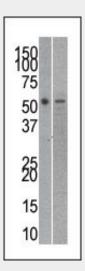
WB~~1:1000

Format

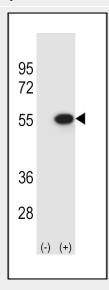
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2



The anti-RUVBL21 Pab (Cat. #AP1922d) is used in Western blot to detect RUVBL2 in mouse kidney (left) and SK-Br-3 (right) tissue/cell line lysates.



Western blot analysis of RUVBL2 (arrow) using rabbit polyclonal RUVBL2 Antibody (Cat. #AP1922d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RUVBL2 gene.

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



weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Reptin/TIP49B/RUVB2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Reptin/TIP49B/RUVB2 Antibody (C-term) - 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:<a href="http://www.uniprot.org/c

target="_blank">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:<a href="

itations/14966270"

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) - 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).



http://www.uniprot.org/citations/14966270" target=" blank">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: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 LocationUbiquitously expressed. Highly expressed in testis and thymus.

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

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture