

TIP48 / RUVBL2 Antibody

Rabbit Polyclonal Antibody Catalog # ALS13246

Specification

TIP48 / RUVBL2 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Dilution

WB, IHC-P

O9Y230

Human

Rabbit

Polyclonal

51kDa KDa

WB~~1:1000

IHC-P~~N/A

TIP48 / RUVBL2 Antibody - Additional Information

Gene ID 10856

Other Names

RuvB-like 2, 3.6.4.12, 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

Human RUVBL2. Predicted cross-reactivity based on amino acid sequence homology: mouse (99%), rat (99%), bovine (98%), zebrafish (82%).

Reconstitution & Storage

Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions

TIP48 / RUVBL2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TIP48 / RUVBL2 Antibody - 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, PubMed:<a



href="http://www.uniprot.org/citations/33205750" target="_blank">33205750). 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

href="http://www.uniprot.org/citations/14966270" 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: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: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

Tissue Location

Ubiquitously expressed. Highly expressed in testis and thymus.

replicative senescence, apoptosis, and DNA repair (PubMed: <a

Volume 50 µl

TIP48 / RUVBL2 Antibody - Protocols

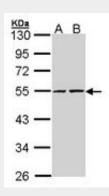
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence

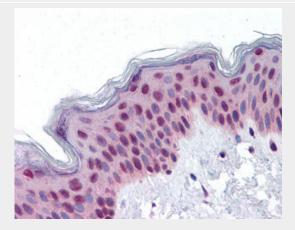


- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

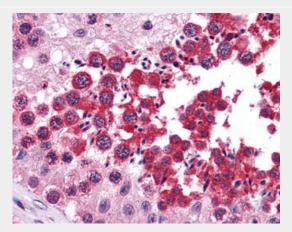
TIP48 / RUVBL2 Antibody - Images



Sample (30 ug of whole cell lysate).

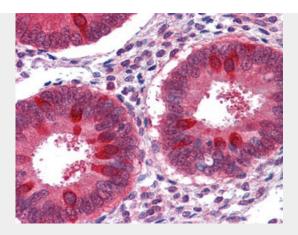


Anti-RUVBL2 antibody IHC of human skin.



Anti-RUVBL2 antibody IHC of human testis.





Anti-RUVBL2 antibody IHC of human uterus.

TIP48 / RUVBL2 Antibody - Background

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. Proposed core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair.

TIP48 / RUVBL2 Antibody - References

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