

# 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

<u>09Y230</u>
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:<a

href="http://www.uniprot.org/citations/10428817" target="\_blank">10428817</a>, PubMed:<a href="http://www.uniprot.org/citations/17157868" target="\_blank">17157868</a>, PubMed:<a



href="http://www.uniprot.org/citations/33205750" target="\_blank">33205750</a>). 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:<a href="http://www.uniprot.org/citations/14966270" target="\_blank">14966270</a>). This modification may both alter nucleosome -DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription (PubMed:<a href="http://www.uniprot.org/citations/14966270" target="\_blank">14966270</a>). 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</a>). 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="http://www.uniprot.org/citations/14966270" target="\_blank">14966270</a>). NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage (PubMed:<a href="http://www.uniprot.org/citations/14966270" target="\_blank">14966270</a>). Component of a SWR1-like complex that specifically mediates the removal of histone H2A.Z/H2AZ1 from the nucleosome (PubMed:<a

href="http://www.uniprot.org/citations/24463511" target="\_blank">24463511</a>). Proposed core component of the chromatin remodeling INO80 complex which exhibits DNA- and nucleosome-activated ATPase activity and catalyzes ATP- dependent nucleosome sliding (PubMed:<a href="http://www.uniprot.org/citations/16230350" target="\_blank">16230350</a>, PubMed:<a href="http://www.uniprot.org/citations/21303910" target="\_blank">21303910</a>). Plays an essential role in oncogenic transformation by MYC and also modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex (PubMed:<a

href="http://www.uniprot.org/citations/10882073" target="\_blank">10882073</a>, PubMed:<a href="http://www.uniprot.org/citations/16014379" target="\_blank">16014379</a>). May also inhibit the transcriptional activity of ATF2 (PubMed:<a

href="http://www.uniprot.org/citations/11713276" target="\_blank">11713276</a>). Involved in the endoplasmic reticulum (ER)-associated degradation (ERAD) pathway where it negatively regulates expression of ER stress response genes (PubMed:<a

href="http://www.uniprot.org/citations/25652260" target="\_blank">25652260</a>). May play a role in regulating the composition of the U5 snRNP complex (PubMed:<a href="http://www.uniprot.org/citations/28561026" target=" blank">28561026</a>).

#### **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

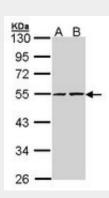
Provided below are standard protocols that you may find useful for product applications.

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

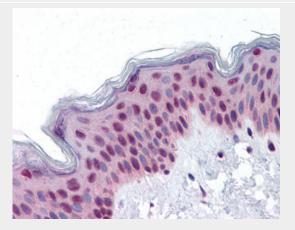


- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

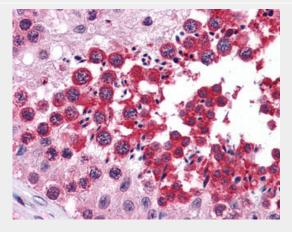
# TIP48 / RUVBL2 Antibody - Images



Sample (30 ug of whole cell lysate).

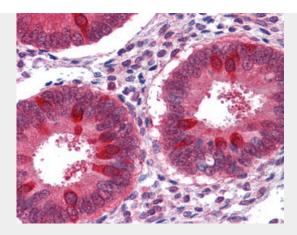


Anti-RUVBL2 antibody IHC of human skin.



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).