

**RUVBL2 antibody - N-terminal region** Rabbit Polyclonal Antibody

Catalog # Al10055

## Specification

# **RUVBL2** antibody - N-terminal region - Product Information

Application Primary Accession Other Accession Reactivity

Predicted

Host Clonality Calculated MW IHC, WB <u>O9Y230</u> <u>O9Y230</u>, <u>NP\_006657</u>, <u>NM\_006666</u> Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine, Yeast Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse Rabbit Polyclonal 51 kDa KDa

## **RUVBL2** antibody - N-terminal region - Additional Information

Gene ID 10856

Alias Symbol

RVB2, TIH2, ECP51, TIP48, CGI-46, INO80J, REPTIN, TIP49B

### **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

RuvB-Like 2 (48-kDa TATA box-binding protein-interacting protein, Reptin 52, RUVBL2) is 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 protein 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.

#### Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

#### **Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-RUVBL2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

#### Precautions

RUVBL2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

# **RUVBL2** antibody - N-terminal region - 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 replicative senescence, apoptosis, and DNA repair (PubMed: <a 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.

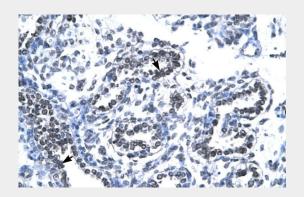
# **RUVBL2** antibody - N-terminal region - Protocols

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

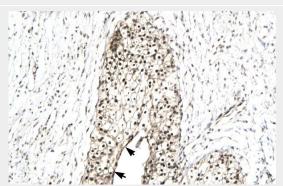


- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

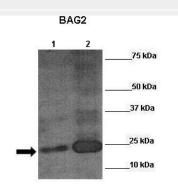
### **RUVBL2** antibody - N-terminal region - Images



RUVBL2 antibody - N-terminal region (AI10055) in Human Lung cells using Immunohistochemistry Human Lung



RUVBL2 antibody - N-terminal region (Al10055) in Human urinary bladder cells using Immunohistochemistry Human urinary bladder



RUVBL2 antibody - N-terminal region (Al10055) in siRUVBL2 transfected H1299 cells using Western Blot Sample Type : Lane 1: 20ug untransfected H1299 cells Lane 2: 20ug siRUVBL2 transfected H1299



cells

Primary Antibody Dilution : 1:1000 Secondary Antibody: Anti-rabbit-HRP Secondary Antibody Dilution: 1:3000 Color/Signal Descriptions: RUVBL2 Gene Name: Wenwei Hu, Xuetian Yue, Rutgers Cancer Institute of New Jersey. Submitted by:

90 kDa		
60 kDa		
42 kDa	-	
32 kDa		
23 kDa		

RUVBL2 antibody - N-terminal region (Al10055) in Human Daudi cells using Western Blot WB Suggested Anti-RUVBL2 Antibody Titration: 2.0-4.0µg/ml Positive Control: Daudi cell lysate RUVBL2 is supported by BioGPS gene expression data to be expressed in Daudi

# **RUVBL2** antibody - N-terminal region - Background

This is a rabbit polyclonal antibody against RUVBL2. It was validated on Western Blot and immunohistochemistry by Abgent. At Abgent we manufacture rabbit polyclonal antibodies on a large scale (200-1000 products/month) of high throughput manner. Our antibodies are peptide based and protein family oriented. We usually provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).