

**RUVBL2 antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI10055****Specification**

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

Application	IHC, WB
Primary Accession	<a href="#">O9Y230</a>
Other Accession	<a href="#">O9Y230</a> , <a href="#">NP_006657</a> , <a href="#">NM_006666</a>
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine, Yeast
Predicted	Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	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

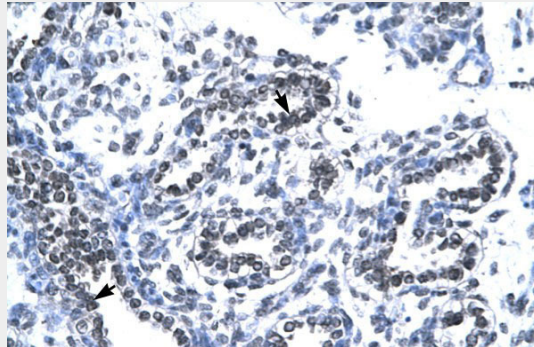
Ubiquitously expressed. Highly expressed in testis and thymus.

## RUVBL2 antibody - N-terminal region - Protocols

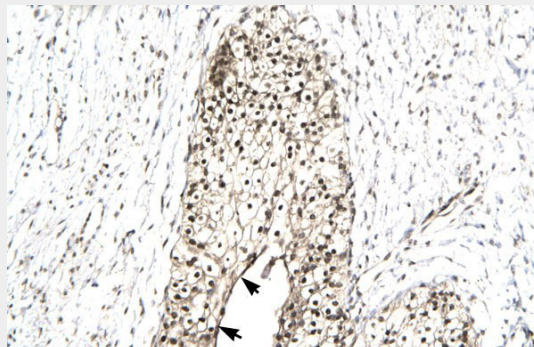
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

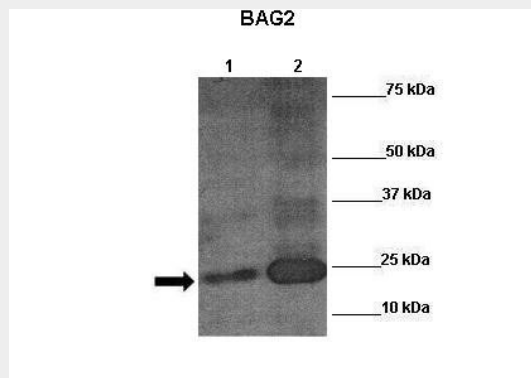
### RUVBL2 antibody - N-terminal region - Images



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



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



RUVBL2 antibody - N-terminal region (AI10055) in siRUVBL2 transfected H1299 cells using  
Western Blot  
Sample Type : Lane 1: 20ug untransfected H1299 cells Lane 2: 20ug siRUVBL2 transfected H1299

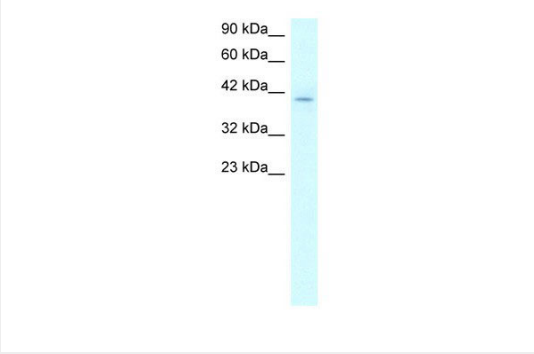
cells

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 (AI10055) 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](mailto:sales@abgent.com)).