

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

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

|                   |  |
|-------------------|--|
| Application       | WB, IHC  |
| 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**

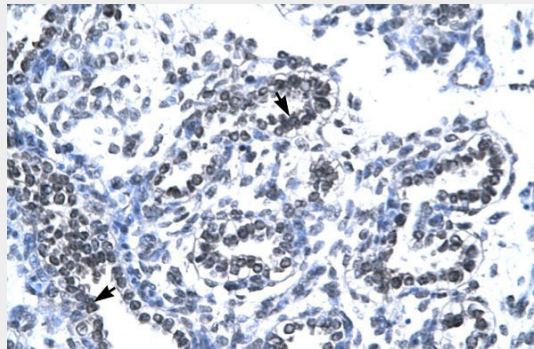
Ubiquitously expressed. Highly expressed in testis and thymus.

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

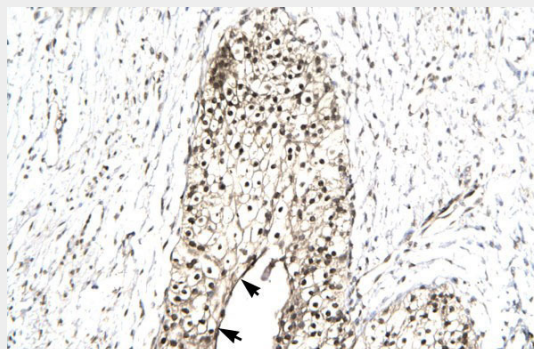
Provided below are standard protocols that you may find useful for product applications.

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

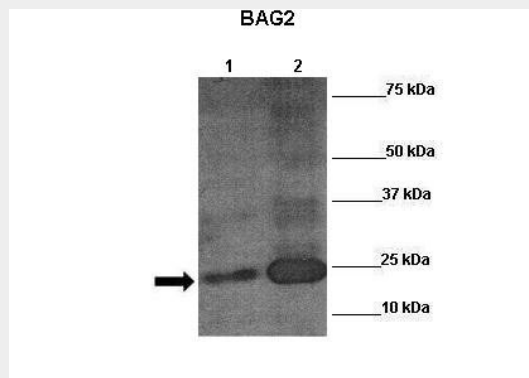
#### RUVBL2 antibody - N-terminal region - Images



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

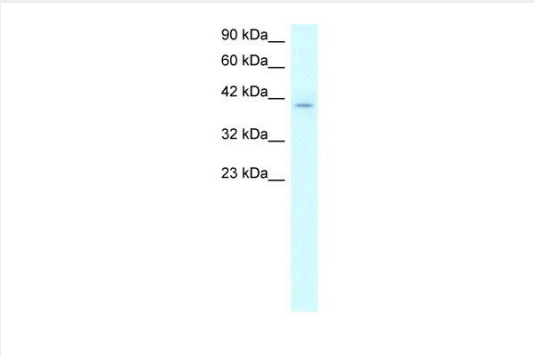
cells

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)).