

RUVBL2 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI10055

Product Information

Application WB, IHC Primary Accession Q9Y230

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine,

Yeast

Predicted Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse

HostRabbitClonalityPolyclonalCalculated MW51157

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.

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: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 replicative senescence, apoptosis, and DNA repair (PubMed: 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 DNAand 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

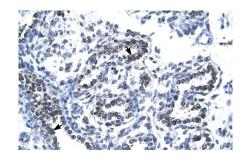
Ubiquitously expressed. Highly expressed in testis and thymus.

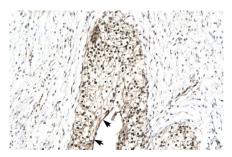
Background

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).

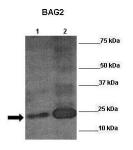
Images

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

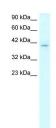




RUVBL2 antibody - N-terminal region (AI10055) in Human urinary bladder cells using Immunohistochemistry Human urinary bladder



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:



RUVBL2 antibody - N-terminal region (AI10055) in Human Daudi cells using Western Blot WB Suggested Anti-RUVBL2 Antibody Titration: 2.0-4.0 µg/ml Positive Control: Daudi cell lysate RUVBL2 is supported by BioGPS gene expression data to be expressed in Daudi

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.