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RUVBL1 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI10050

Specification

RUVBL1 antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	Q9Y265
Other Accession	Q9Y265, NP_003698, NM_003707
Reactivity	**Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Guinea Pig, Horse, Bovine**
Predicted	**Human, Mouse, Rabbit, Zebrafish, Chicken, Dog, Horse, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**50 kDa KDa**

RUVBL1 antibody - N-terminal region - Additional Information

Gene ID 8607

Alias Symbol	**ECP54, NMP238, Pontin52, RVB1, TIH1, TIP49, TIP49A, INO80H, PONTIN**

Other Names
RuvB-like 1, 49 kDa TATA box-binding protein-interacting protein, 49 kDa TBP-interacting protein, 54 kDa erythrocyte cytosolic protein, ECP-54, INO80 complex subunit H, Nuclear matrix protein 238, NMP 238, Pontin 52, TIP49a, TIP60-associated protein 54-alpha, TAP54-alpha, RUVBL1, INO80H, NMP238, TIP49, TIP49A

Target/Specificity
RUVBL1 possesses single-stranded DNA-stimulated ATPase and ATP-dependent DNA helicase (3' to 5') activity. It is the component of the NuA4 histone acetyltransferase complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histone H4 and H2A. The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. RUVBL1 plays an essential role in oncogenic transformation by MYC and also modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex.

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

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-RUVBL1 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
RUVBL1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

RUVBL1 antibody - N-terminal region - Protein Information

Name RUVBL1 (HGNC:10474)

Function
Possesses single-stranded DNA-stimulated ATPase and ATP- dependent DNA helicase (3' to 5') activity; hexamerization is thought to be critical for ATP hydrolysis and adjacent subunits in the ring- like structure contribute to the ATPase activity (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. 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 DNA- and 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). Essential for cell proliferation (PubMed:14506706). May be able to bind plasminogen at cell surface and enhance plasminogen activation (PubMed:11027681).

Cellular Location
Nucleus matrix. Nucleus, nucleoplasm. Cytoplasm. Membrane Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Dynein axonemal particle {ECO:0000250|UniProtKB:Q9DE26}. 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. In prophase and prometaphase it is located at the centrosome and the branching microtubule spindles. After mitotic nuclear membrane disintigration it accumulates at the centrosome and sites of tubulin polymerization. As cells pass through metaphase and into telophase it is located close to the centrosome at the early phase of tubulin polymerization. In anaphase it accumulates at the zone of tubule interdigitation. In telophase it is found at polar tubule overlap, and it reappears at the site of chromosomal decondensation in the daughter cells

Tissue Location
Ubiquitously expressed with high expression in heart, skeletal muscle and testis

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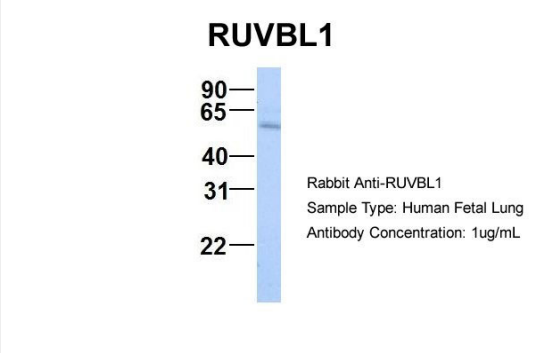
RUVBL1 antibody - N-terminal region - Protocols

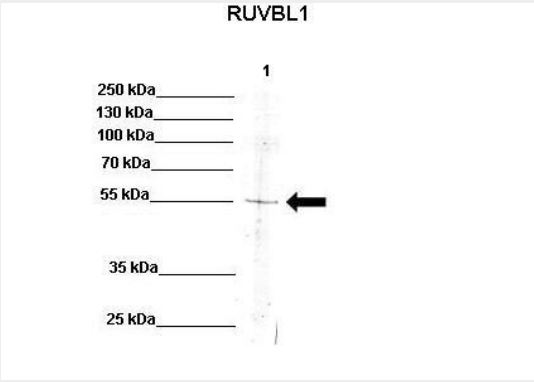
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RUVBL1 antibody - N-terminal region - Images



RUVBL1 antibody - N-terminal region (AI10050) in Hum. Fetal Lung cells using Western Blot
Host: Rabbit
Target Name: RUVBL1
Sample Tissue: Human Fetal Lung
Antibody Dilution: 1.0µg/ml



RUVBL1 antibody - N-terminal region (AI10050) in K562 cells using Western Blot
WB Suggested Anti-RUVBL1 Antibody
Positive Control: Lane 1: 30ug K562 lysate
Primary Antibody Dilution : 1:200
Secondary Antibody : Anti-rabbit-HRP
Secondry Antibody Dilution : 1:1000
Submitted by: Sustackova Gabriela

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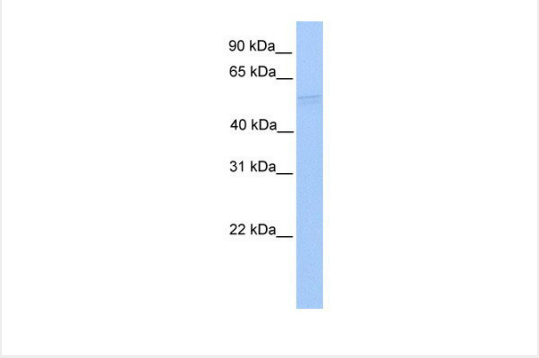

RUVBL1 antibody - N-terminal region (AI10050) in Human Heart cells using Western Blot
WB Suggested Anti-RUVBL1 Antibody Titration: 0.2-1 µg/ml
Positive Control: Human heart

RUVBL1 antibody - N-terminal region - Background

This is a rabbit polyclonal antibody against RUVBL1. It was validated on Western Blot using a cell lysate as a positive control. Abgent strives to 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).