

**Reptin/TIP49B/RUVB2 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1922D**

**Specification**

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**Reptin/TIP49B/RUVB2 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9Y230</a>
Other Accession	<a href="#">O9DE27</a> , <a href="#">O9WTM5</a> , <a href="#">Q2TBU9</a> , <a href="#">Q6FIB9</a>
Reactivity	Human, Mouse
Predicted	Bovine, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	400-430

**Reptin/TIP49B/RUVB2 Antibody (C-term) - Additional Information**

**Gene ID** 10856

**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**

This Reptin/TIP49B/RUVB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 400-430 amino acids from the C-terminal region of human Reptin/TIP49B/RUVB2.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Reptin/TIP49B/RUVB2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**Reptin/TIP49B/RUVB2 Antibody (C-term) - 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 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](#)). 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

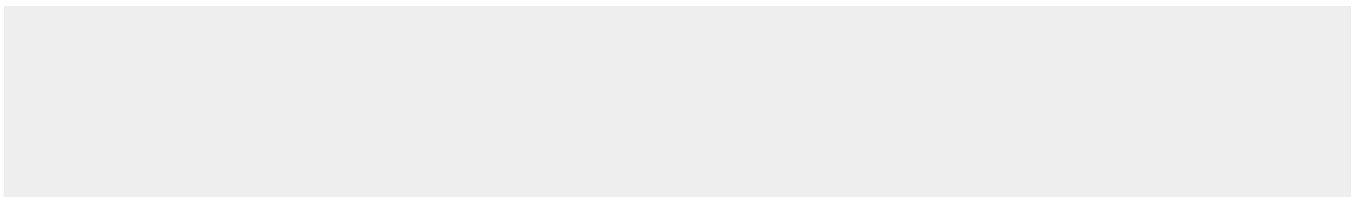
**Tissue Location**

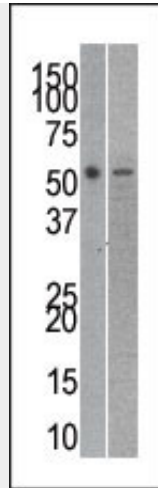
Ubiquitously expressed. Highly expressed in testis and thymus.

**Reptin/TIP49B/RUVB2 Antibody (C-term) - Protocols**

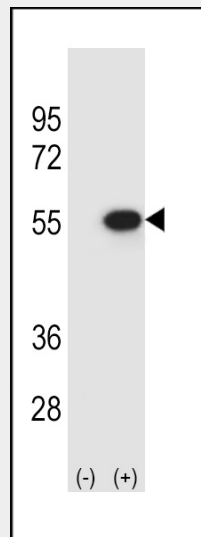
Provided below are standard protocols that you may find useful for product applications.

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

**Reptin/TIP49B/RUVB2 Antibody (C-term) - Images**



The anti-RUVBL21 Pab (Cat. #AP1922d) is used in Western blot to detect RUVBL2 in mouse kidney (left) and SK-Br-3 (right) tissue/cell line lysates.



Western blot analysis of RUVBL2 (arrow) using rabbit polyclonal RUVBL2 Antibody (Cat. #AP1922d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RUVBL2 gene.

#### **Reptin/TIP49B/RUVB2 Antibody (C-term) - Background**

This gene encodes 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 gene product 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.

#### **Reptin/TIP49B/RUVB2 Antibody (C-term) - References**

- Bauer, A., et al., EMBO J. 19(22):6121-6130 (2000).
- Parfait, B., et al., Ann. Genet. 43(2):69-74 (2000).
- Wood, M.A., et al., Mol. Cell 5(2):321-330 (2000).
- Salzer, U., et al., Biochim. Biophys. Acta 1446(3):365-370 (1999).
- Kanemaki, M., et al., J. Biol. Chem. 274(32):22437-22444 (1999).