

TIP49A Antibody

Rabbit mAb

Catalog # AP92434

Product Information

Application	WB, FC
Primary Accession	Q9Y265
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	ECP54; Pontin 52; PONTIN; RuvB like 1; RUVBL1; RVB1; TAP54 alpha; TIP49; TIP49a;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	50228

Additional Information

Dilution	WB 1:500~1:2000 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human TIP49A
Description	Possesses single-stranded DNA-stimulated ATPase and ATP-dependent DNA helicase (3' to 5') activity. 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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](#)).

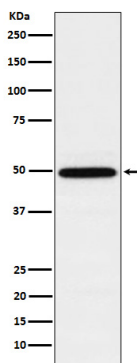
Cellular Location

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 disintegration 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

Images



Western blot analysis of TIP49A expression in K562 cell lysate.

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