

RUVBL1 antibody (pAb)

Catalog Nos: 61711, 61712**RRID:** AB_2793746**Isotype:** IgG**Application(s):** WB**Reactivity:** Human**Volumes:** 100 µl, 10 µl**Purification:** Affinity Purified**Host:** Rabbit**Molecular Weight:** 55 kDa

Background: RUVBL1 (RuvB-Like AAA ATPase 1) 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. 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. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. 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. 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. Component of a SWR1-like complex that specifically mediates the removal of histone H2A.Z/H2AFZ from the nucleosome. Proposed core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair. Plays an essential role in oncogenic transformation by MYC and also modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex. Essential for cell proliferation. May be able to bind plasminogen at cell surface and enhance plasminogen activation.

Immunogen: This antibody was raised against a peptide within human RUVBL1.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

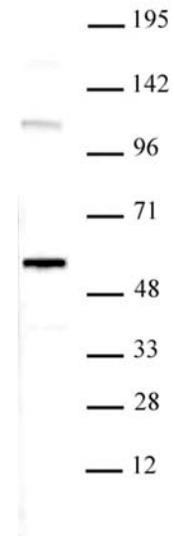
Applications Validated by Active Motif:

WB*: 1:500 - 1:2,000 dilution

The addition of 0.05% Tween 20 in the blocking buffer and primary antibody incubation buffer is recommended to aid in detection by Western blot. Individual optimization may be required.

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by

**RUVBL1 antibody (pAb) tested by Western blot.**

RUVBL1 detection by Western blot. The analysis was performed using Raji cell nuclear extract (20 µg) and RUVBL1 antibody at a 1:500 dilution.