

Datasheet for ABIN7555323

## RUVBL1 Protein (AA 1-456) (His tag)



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### 3 Images

#### Overview

Quantity:	1 mg
Target:	RUVBL1
Protein Characteristics:	AA 1-456
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RUVBL1 protein is labelled with His tag.

#### Product Details

Purpose:	Custom-made recombinant RUVBL1 Protein expressed in mammalian cells.
Sequence:	<p>MKIEEVKSTT KTQRIASHSH VKGLGLDESG LAKQAASGLV GQENAREACG VIVELIKSKK  MAGRAVLLAG PPGTGKTALA LAIAQELGSK VPFCPMVGSE VYSTEIKKTE VLMENFRRAI  GLRIKETKEV YEGEVTELT CETENPMGGY GKTISHVIIG LKTAKGTKQL KLDPSIFESL  QKERVEAGDV IYIEANSNAV KRQGRCDTYA TEFDLAEAY VPLPKGDVHK KKEIQDVTI  HDLVDANARP QGGQDILSMM GQLMKPKKTE ITDKLRGEIN KVVNKYIDQG IAEIVPGVLF  VDEVHMLDIE CFTYLHRALE SSIAPIVIFA SNRGNCVIRG TEDITSPHGI PLDLLDRVMI  IRTMLYTPQE MKQIIKIRAQ TEGINISEEA LNHLGEIGTK TTLRYSVQLL TPANLLAKIN  GKDSIEKEHV EEISELFYDA KSSAKILADQ QDKYMK</p> <p><b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different

## Product Details

isoform, please contact us regarding an individual offer.

### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

### Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

### Grade:

custom-made

## Target Details

### Target:

RUVBL1

### Alternative Name:

RUVBL1 ([RUVBL1 Products](#))

### Background:

RuvB-like 1 (EC 3.6.4.12) (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), 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-

## Target Details

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). {ECO:0000269|PubMed:10882073, ECO:0000269|PubMed:11027681, ECO:0000269|PubMed:14506706, ECO:0000269|PubMed:14966270, ECO:0000269|PubMed:16014379, ECO:0000269|PubMed:16230350, ECO:0000269|PubMed:17157868, ECO:0000269|PubMed:21303910, ECO:0000269|PubMed:24463511, ECO:0000269|PubMed:33205750}.

Molecular Weight: 50.2 kDa

UniProt: [Q9Y265](#)

Pathways: [Telomere Maintenance](#)

## Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

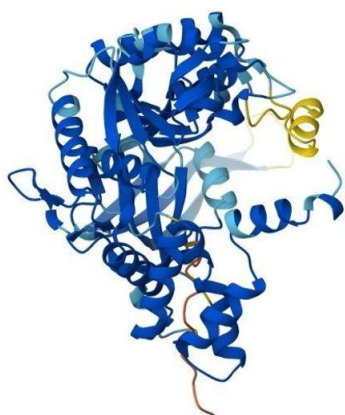
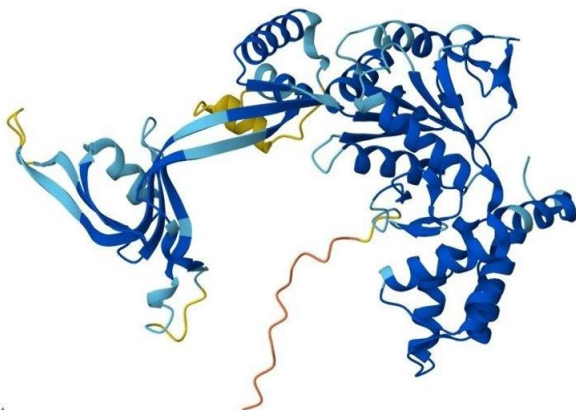
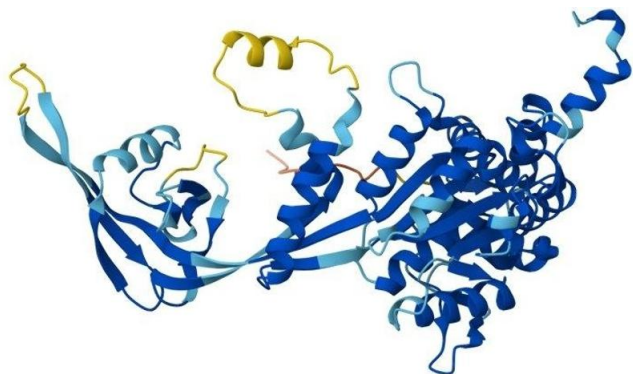
Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.



#### Protein Structure

**Image 1.** AlphaFold protein structure prediction of Human Recombinant RUVBL1 Protein, UniprotID Q9Y265

#### Protein Structure

**Image 2.** AlphaFold protein structure prediction of Human Recombinant RUVBL1 Protein, UniprotID Q9Y265

#### Protein Structure

**Image 3.** AlphaFold protein structure prediction of Human Recombinant RUVBL1 Protein, UniprotID Q9Y265