

## Datasheet for ABIN7562919

# PPIA Protein (AA 1-164) (His tag)





#### Overview

Quantity:	1 mg
Target:	PPIA
Protein Characteristics:	AA 1-164
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPIA protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Ppia Protein expressed in mammalian cells.
Sequence:	MVNPTVFFDI TADDEPLGRV SFELFADKVP KTAENFRALS TGEKGFGYKG SSFHRIIPGF
	MCQGGDFTRH NGTGGRSIYG EKFEDENFIL KHTGPGILSM ANAGPNTNGS QFFICTAKTE
	WLDGKHVVFG KVKEGMNIVE AMERFGSRNG KTSKKITISD CGQL 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	<ul> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> </ul>
	<ul> <li>The optimized expression system ensures reliability for intracellular, secreted and</li> </ul>

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:

PPIA

Alternative Name:

Ppia (PPIA Products)

Background:

Peptidyl-prolyl cis-trans isomerase A (PPlase A) (EC 5.2.1.8) (Cyclophilin A) (Cyclosporin Abinding protein) (Rotamase A) (SP18) [Cleaved into: Peptidyl-prolyl cis-trans isomerase A, Nterminally processed],FUNCTION: Catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides (PubMed:24429998). Exerts a strong chemotactic effect on leukocytes partly through activation of one of its membrane receptors BSG/CD147, initiating a signaling cascade that culminates in MAPK/ERK activation (By similarity). Activates endothelial cells (ECs) in a pro-inflammatory manner by stimulating activation of NF-kappa-B and ERK, JNK and p38 MAP-kinases and by inducing expression of adhesion molecules including SELE and VCAM1 (By similarity). Induces apoptosis in ECs by promoting the FOXO1-dependent expression of CCL2 and BCL2L11 which are involved in EC chemotaxis and apoptosis (By similarity). In response to oxidative stress, initiates proapoptotic and antiapoptotic signaling in ECs via activation of NF-kappa-B and AKT1 and up-regulation of antiapoptotic protein BCL2 (By similarity). Negatively regulates MAP3K5/ASK1 kinase activity, autophosphorylation and oxidative stress-induced apoptosis mediated by MAP3K5/ASK1 (By similarity). Necessary for the assembly of TARDBP in heterogeneous nuclear ribonucleoprotein (hnRNP) complexes and regulates TARDBP binding to RNA UG repeats and TARDBP-dependent expression of HDAC6, ATG7 and VCP which are involved in clearance of protein aggregates (PubMed:25678563).

#### **Target Details**

Plays an important role in platelet activation and aggregation (PubMed:24429998). Regulates calcium mobilization and integrin ITGA2B:ITGB3 bidirectional signaling via increased ROS production as well as by facilitating the interaction between integrin and the cell cytoskeleton (PubMed:24429998). Binds heparan sulfate glycosaminoglycans (By similarity). {ECO:0000250|UniProtKB:P62937, ECO:0000269|PubMed:24429998, ECO:0000269|PubMed:25678563}.

Molecular Weight:

18.0 kDa

UniProt:

P17742

#### **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:

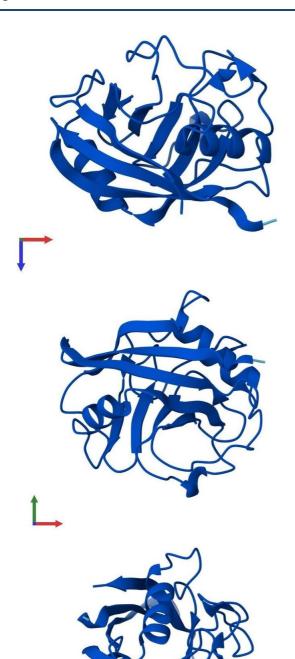
For Research Use only

12 months

#### Handling

Expiry Date:

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 predicition of Mouse Recombinant Ppia Protein, UniprotID P17742

#### **Protein Structure**

Image 2. AlphaFold protein structure predicition of Mouse Recombinant Ppia Protein, UniprotID P17742

#### **Protein Structure**

Image 3. AlphaFold protein structure predicition of Mouse Recombinant Ppia Protein, UniprotID P17742