

Datasheet for ABIN7554586  
**MPP5 Protein (AA 1-675) (His tag)**



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## Overview

Quantity:	1 mg
Target:	MPP5
Protein Characteristics:	AA 1-675
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MPP5 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant PALS1 Protein expressed in mammalian cells.
Sequence:	MTTSHMNGHV TEESDSEVKN VDLASPEEHQ KHREMAVDCP GDLGTRMMPI RRSACLERIR QQQEDMRRRR EEEGKKQELD LNSSMRLKKL AQIPPKTGID NPMFDTEEG VLESPHYAVK ILEIEDLFSS LKHIQHTLVD SQSQEDISLL LQLVQNKDFQ NAFKIHNAIT VHMNKASPPF PLISNAQDLA QEVQTVLKPV HHKEGQELTA LLNTPHIQAL LLAHDKVAEQ EMQLEPITDE RVYESIGQYG GETVKIVRIE KARDIPLGAT VRNEMDSVII SRIVKGGAAE KSGLLHEGDE VLEINGIEIR GKDVNEVFDL LSDMHGTLTF VLIPSQQIKP PPAKETVIHV KAHFDYDPSD DPYVPCRELG LSFQKGDILH VISQEDPNWW QAYREGDEDN QPLAGLVPGK SFQQQREAMK QTIEEDEKEPE KSGKLWCAKK NKKKRKVVLY NANKNDDYDN EEILTYEEMS LYHQPANRKR PIILIGPQNC GQNELRQRLM NKEKDRFASA VPHTTRSRRD QEVAGRDIYHF VSRQAFEADI AAGKFIEHGE FEKNLYGTSI DSVRQVINSK KICLLSLRTQ SLKTLRNSDL KPYIIFIAPP SQERLRALLA KEGKNPKPEE LREIIEKTRE MEQNNGHYFD TAINSDLDK AYQELLRLIN KLDTEPQWVP STWLR <b>Sequence without tag. The proposed Purification-Tag is based on</b>

## Product Details

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**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.**

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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.

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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.

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

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Grade: custom-made

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## Target Details

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Target: MPP5

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Alternative Name: PALS1 ([MPP5 Products](#))

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Background: Protein PALS1 (MAGUK p55 subfamily member 5) (Membrane protein, palmitoylated 5) (Protein associated with Lin-7 1),FUNCTION: Plays a role in tight junction biogenesis and in the establishment of cell polarity in epithelial cells (PubMed:16678097, PubMed:25385611). Also involved in adherens junction biogenesis by ensuring correct localization of the exocyst complex protein EXOC4/SEC8 which allows trafficking of adherens junction structural component CDH1 to the cell surface (By similarity). Plays a role through its interaction with CDH5 in vascular lumen formation and endothelial membrane polarity (PubMed:27466317). Required during embryonic and postnatal retinal development (By similarity). Required for the maintenance of cerebellar progenitor cells in an undifferentiated proliferative state, preventing

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## Target Details

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premature differentiation, and is required for cerebellar histogenesis, fissure formation, cerebellar layer organization and cortical development (By similarity). Plays a role in neuronal progenitor cell survival, potentially via promotion of mTOR signaling (By similarity). Plays a role in the radial and longitudinal extension of the myelin sheath in Schwann cells (By similarity). May modulate SC6A1/GAT1-mediated GABA uptake by stabilizing the transporter (By similarity). Plays a role in the T-cell receptor-mediated activation of NF-kappa-B (PubMed:21479189). Required for localization of EZR to the apical membrane of parietal cells and may play a role in the dynamic remodeling of the apical cytoskeleton (By similarity). Required for the normal polarized localization of the vesicular marker STX4 (By similarity). Required for the correct trafficking of the myelin proteins PMP22 and MAG (By similarity). Involved in promoting phosphorylation and cytoplasmic retention of transcriptional coactivators YAP1 and WWTR1/TAZ which leads to suppression of TGF $\beta$ 1-dependent transcription of target genes such as CCN2/CTGF, SERPINE1/PAI1, SNAI1/SNAIL1 and SMAD7 (By similarity). {ECO:0000250|UniProtKB:B4F7E7, ECO:0000250|UniProtKB:Q9JLB2, ECO:0000269|PubMed:16678097, ECO:0000269|PubMed:21479189, ECO:0000269|PubMed:25385611, ECO:0000269|PubMed:27466317}., FUNCTION: (Microbial infection) Acts as an interaction partner for human coronaviruses SARS-CoV and, probably, SARS-CoV-2 envelope protein E which results in delayed formation of tight junctions and disregulation of cell polarity. {ECO:0000269|PubMed:20861307, ECO:0000303|PubMed:32891874}.

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Molecular Weight: 77.3 kDa

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UniProt: [Q8N3R9](#)

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Pathways: [Nucleotide Phosphorylation](#), [Tube Formation](#), [Asymmetric Protein Localization](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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

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Handling Advice: Avoid repeated freeze-thaw cycles.

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## Handling

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months