

## Datasheet for ABIN7554955

# PLEKHM1 Protein (AA 1-1056) (His tag)



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## Overview

Quantity:	1 mg
Target:	PLEKHM1
Protein Characteristics:	AA 1-1056
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLEKHM1 protein is labelled with His tag.

## **Product Details**

Purpose:	Custom-made recombinant PLEKHM1 Protein expressed in mammalian cells.
Sequence:	MLSVVENGLD PQAAIPVIKK KLVGSVKALQ KQYVSLDTVV TSEDGDANTM CSALEAVFIH
	GLHAKHIRAE AGGKRKKSAH QKPLPQPVFW PLLKAVTHKH IISELEHLTF VNTDVGRCRA
	WLRLALNDGL MECYLKLLLQ EQARLHEYYQ PTALLRDAEE GEFLLSFLQG LTSLSFELSY
	KSAILNEWTL TPLALSGLCP LSELDPLSTS GAELQRKESL DSISHSSGSE DIEVHHSGHK
	IRRNQKLTAS SLSLDTASSS QLSCSLNSDS CLLQENGSKS PDHCEEPMSC DSDLGTANAE
	DSDRSLQEVL LEFSKAQVNS VPTNGLSQET EIPTPQASLS LHGLNTSTYL HCEAPAEPLP
	AQAASGTQDG VHVQEPRPQA PSPLDLQQPV ESTSGQQPSS TVSETAREVG QGNGLQKAQA
	HDGAGLKLVV SSPTSPKNKS WISEDDFYRP SREQPLESAS DHPIASYRGT PGSRPGLHRH
	FSQEPRKNCS LGALDQACVP SPGRRQAQAA PSQGHKSFRV VHRRQMGLSN PFRGLMKLGT
	VERRGAMGIW KELFCELSPL EFRLYLSNEE HTCVENCSLL RCESVGPAHS DGRFELVFSG
	KKLALRASSQ DEAEDWLDRV REALQKVRPQ QEDEWVNVQY PDQPEEPPEA PQGCLSPSDL
	LSEPAALQGT QFDWSSAQVP EPDAIKESLL YLYMDRTWMP YIFSLSLEAL KCFRIRNNEK

MLSDSHGVET IRDILPDTSL GGPSFFKIIT AKAVLKLQAG NAEEAALWRD LVRKVLASYL
ETAEEAVTLG GSLDENCQEV LKFATRENGF LLQYLVAIPM EKGLDSQGCF CAGCSRQIGF
SFVRPKLCAF SGLYYCDICH QDDASVIPAR IIHNWDLTKR PICRQALKFL TQIRAQPLIN
LQMVNASLYE HVERMHLIGR RREQLKLLGD YLGLCRSGAL KELSKRLNHR NYLLESPHRF
SVADLQQIAD GVYEGFLKAL IEFASQHVYH CDLCTQRGFI CQICQHHDII FPFEFDTTVR
CAECKTVFHQ SCQAVVKKGC PRCARRRKYQ EQNIFA 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.

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.

#### Specificity:

#### 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:	PLEKHM1
Alternative Name:	PLEKHM1 (PLEKHM1 Products)
Background:	Pleckstrin homology domain-containing family M member 1 (PH domain-containing family M
	member 1) (162 kDa adapter protein) (AP162),FUNCTION: Acts as a multivalent adapter protein

that regulates Rab7-dependent and HOPS complex-dependent fusion events in the endolysosomal system and couples autophagic and the endocytic trafficking pathways. Acts as a dual effector of RAB7A and ARL8B that simultaneously binds these GTPases, bringing about clustering and fusion of late endosomes and lysosomes (PubMed:25498145, PubMed:28325809). Required for late stages of endolysosomal maturation, facilitating both endocytosis-mediated degradation of growth factor receptors and autophagosome clearance. Interaction with Arl8b is a crucial factor in the terminal maturation of autophagosomes and to mediate autophagosome-lysosome fusion (PubMed:25498145). Positively regulates lysosome peripheral distribution and ruffled border formation in osteoclasts (By similarity). May be involved in negative regulation of endocytic transport from early endosome to late endosome/lysosome implicating its association with Rab7 (PubMed:20943950). May have a role in sialyl-lex-mediated transduction of apoptotic signals (PubMed:12820725). Involved in bone resorption (By similarity). {ECO:0000250|UniProtKB:Q5PQS0, ECO:0000250|UniProtKB:Q7TSI1, ECO:0000269|PubMed:12820725, ECO:0000269|PubMed:20943950, ECO:0000269|PubMed:25498145, ECO:0000269|PubMed:28325809}., FUNCTION: (Microbial infection) In case of infection contributes to Salmonella typhimurium pathogenesis by supporting the integrity of the Salmonella-containing vacuole (SCV) probably in concert with the HOPS complex and Rab7. {ECO:0000269|PubMed:25500191}.

Molecular Weight: 117.4 kDa

UniProt: Q9Y4G2

## **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:

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

Handling Advice:
Avoid repeated freeze-thaw cycles.

Storage:
-80 °C

## Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months