

## Datasheet for ABIN7564216

# PLEKHM1 Protein (AA 1-1074) (His tag)



#### Overview

Quantity:	1 mg
Target:	PLEKHM1
Protein Characteristics:	AA 1-1074
Origin:	Mouse
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:	MLSVENGLDP RAAIQVIKKK LVGSVKALQK QHVSLDTVVT SEDGDANTMC SALEAVFIHG
	LHAKHIRAEA GGKRKKHTHQ KALPQPVFWP LLKAITHRHI VSDLEHLVFI NTDVGRCRAW
	LRLALNDGLM ECYLKLLLQE PARLCEYYQP TALLRDAEEA EFLLSFLQGL TSLSFELSYK
	SAILNEWTLT PLSLSGLCPL SELDPLTTSG AELQRKESLD SISHSSGSED IEVQHSGHKI
	RRNRKLTASS LSLDTASSSQ LSCSLNSDSC LLQENGPKSP DHSEEPMSYD SDLGMANTDD
	PDRSLQEVLS EFSKAQVNSA PSSGPNQEPD TPMFQTPLSL HSLATSTHLH FEGSEELFPA
	HKSSGTSSGG HKHQLLPQET PDEKQLGTAQ AGPAQSTSDQ QPSSPVGGAA GQGSGPWKAL
	EYGRVGPKLV VSSPTSPKGK SWISEDDFCR PPQEPALKSA AGLCTSPVQD TPESRAALHG
	PFSQGPRKSC SLGALDKACV PSQACGNAQP APAPAPAP APAPAPGVTQ DHKNFCVVHR
	RQMGLSNPFR GLMKLGTVAR RGAMGIWKEF FCELSPLEFR LYLSDEERTC VESCSLLRCE
	AVGPAHSDGR FELVFSGKKL ALRASSQDEA EDWLDRVREA LQKVRPQQED EWVNIQYPDQ
	AEDAPEAPPD SLPPYSTLLP EPAGAQGMQL DWTSAQVPEP DAIKESLLYL YADRTWVPYI

FSLSLESLKC FRVRNNEKML SDSHGVETIR DILPDTSLGG PAFFKIITAK AVLKLQAKNT
EEATHWRDLV RKVLASYLES AEEAVTLGGS LDEKCQEVLK FATRENGFLL QYLVAIPTEK
GLDSQGCFCA GCSRQIGFSF VRPKLCAFSG LYYCDFCHQD DASVIPARII HNWDLTKRPV
CRQALKFLAQ IRAQPLINLQ LVNASLYEHV ERMHLIGRSR EQLKLLGDYL GLCRSGALKE
LCKRLSHRNY LLESPHRFSV ADLQQIAEGV YEGFLKALIE FASQHVYHCD LCTQRGFICQ
ICHHQDIIFP FEFDTTVRCA ECRTVFHQSC QAVVRKGCPR CARRRKYQEQ NVVS 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.
- · 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),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. 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 (PubMed:27777970). May be involved in negative regulation of endocytic transport from early endosome to late endosome/lysosome implicating its association with Rab7. May have a role in sialyl-lex-mediated transduction of apoptotic signals (By similarity). Involved in bone resorption (PubMed:27777970). {ECO:0000250|UniProtKB:Q9Y4G2, ECO:0000269|PubMed:27777970}.

Molecular Weight: 118.5 kDa

UniProt: Q7TSI1

## **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.
Expiry Date:	12 months