

Datasheet for ABIN7550607

PDLIM4 Protein (AA 1-330) (His tag)



Overview

Quantity:	1 mg
Target:	PDLIM4
Protein Characteristics:	AA 1-330
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDLIM4 protein is labelled with His tag.

Product Details

Product Details	
Purpose:	Custom-made recombinant PDLIM4 Protein expressed in mammalian cells.
Sequence:	MPHSVTLRGP SPWGFRLVGG RDFSAPLTIS RVHAGSKAAL AALCPGDLIQ AINGESTELM
	THLEAQNRIK GCHDHLTLSV SRPEGRSWPS APDDSKAQAH RIHIDPEIQD GSPTTSRRPS
	GTGTGPEDGR PSLGSPYGQP PRFPVPHNGS SEATLPAQMS TLHVSPPPSA DPARGLPRSR
	DCRVDLGSEV YRMLREPAEP VAAEPKQSGS FRYLQGMLEA GEGGDWPGPG GPRNLKPTAS
	KLGAPLSGLQ GLPECTRCGH GIVGTIVKAR DKLYHPECFM CSDCGLNLKQ RGYFFLDERL
	YCESHAKARV KPPEGYDVVA VYPNAKVELV 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:	PDLIM4
Alternative Name:	PDLIM4 (PDLIM4 Products)
Background:	PDZ and LIM domain protein 4 (LIM protein RIL) (Reversion-induced LIM protein),FUNCTION:
	[Isoform 1]: Suppresses SRC activation by recognizing and binding to active SRC and
	facilitating PTPN13-mediated dephosphorylation of SRC 'Tyr-419' leading to its inactivation.
	Inactivated SRC dissociates from this protein allowing the initiation of a new SRC inactivation
	cycle (PubMed:19307596). Involved in reorganization of the actin cytoskeleton
	(PubMed:21636573). In nonmuscle cells, binds to ACTN1 (alpha-actinin-1), increases the
	affinity of ACTN1 to F-actin (filamentous actin), and promotes formation of actin stress fibers.
	Involved in regulation of the synaptic AMPA receptor transport in dendritic spines of
	hippocampal pyramidal neurons directing the receptors toward an insertion at the postsynaptic
	membrane. Links endosomal surface-internalized GRIA1-containing AMPA receptors to the

ECO:0000269|PubMed:19307596, ECO:0000269|PubMed:21636573}., FUNCTION: [Isoform 2]: Involved in reorganization of the actin cytoskeleton and in regulation of cell migration. In

alpha-actinin/actin cytoskeleton. Increases AMPA receptor-mediated excitatory postsynaptic

currents in neurons (By similarity). {ECO:0000250|UniProtKB:P36202,

Target Details

response to oxidative stress, binds to NQO1, which stabilizes it and protects it from ubiquitin-independent degradation by the core 20S proteasome. Stabilized protein is able to heterodimerize with isoform 1 changing the subcellular location of it from cytoskeleton and nuclei to cytosol, leading to loss of isoforms 1 ability to induce formation of actin stress fibers. Counteracts the effects produced by isoform 1 on organization of actin cytoskeleton and cell motility to fine-tune actin cytoskeleton rearrangement and to attenuate cell migration. {ECO:0000269|PubMed:21636573}.

Molecular Weight:

35.4 kDa

UniProt:

P50479

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