

Datasheet for ABIN3135955

PLEKHM1 Protein (AA 1-1074) (Strep Tag)



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Overview

Quantity:	250 μg
Target:	PLEKHM1
Protein Characteristics:	AA 1-1074
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLEKHM1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
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 Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany from design to production by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- · 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
 protein production are removed, leaving only the protein production machinery and the
 mitochondria to drive the reaction. During our lysate completion steps, the additional
 components needed for protein production (amino acids, cofactors, etc.) are added to
 produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

Concentration:

• The concentration of our recombinant proteins is measured using the absorbance at 280nm.

- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Purity:

> 70-80 % as determined by SDS PAGE, 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:25498145, ECO:0000269|PubMed:27777970}.

Molecular Weight:

118.5 kDa

UniProt:

Q7TSI1

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a

Application Details

Expiry Date:

Application Details		
	guarantee though.	
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from	
	Nicotiana tabacum c.v This contains all the protein expression machinery needed to produce	
	even the most difficult-to-express proteins, including those that require post-translational	
	modifications.	
	During lysate production, the cell wall and other cellular components that are not required for	
	protein production are removed, leaving only the protein production machinery and the	
	mitochondria to drive the reaction. During our lysate completion steps, the additional	
	components needed for protein production (amino acids, cofactors, etc.) are added to produce	
	something that functions like a cell, but without the constraints of a living system - all that's	
	needed is the DNA that codes for the desired protein!	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Buffer:	The buffer composition is at the discretion of the manufacturer.	
	Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	

12 months