

Datasheet for ABIN3094582

PLEKHM1 Protein (AA 1-1056) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PLEKHM1
Protein Characteristics:	AA 1-1056
Origin:	Human
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)

Product Details

Brand:	AliCE®
Sequence:	<p> MLSVVENGLD PQAAIPVIKK KLVGSVKALQ KQYVSLDTVV TSEDGDANTM CSALEAVFIH GLHAKHIRAE AGGKRKKSAH QKPLPQPVFW PLLKAVTHKH IISELEHLTF VNTDVGR CRA WLRLALNDGL MECYLKLLLQ EQARLHEYQ PTALLRDAEE GEFLLSFLQG LTSLSFELSY KSAILNEWTL TPLALSGLCPL SELDPLSTS GAELQRKESL DSISHSSGSE DIEVHHSGHK IRRNQKL TAS SLSLDTASSS QLSCSLNSDS CLLQENGSKS PDHCEPMSC DSDLGTANAE DSDRSLQEV L EFSKAQVNS VPTNGLSQET EIPTQASLS LHGLNTSTYL HCEAPAEPLP AQAASGTQDG VHVQEPRPQA PSPLDLQQPV ESTSGQQPSS TVSETAREVG QGNGLQKAQA HDGAGLKL VV SSPTSPKNKS WISEDDFYRP SREQPLESAS DHPIASYRGT PGSRPGLHRH FSQEPRKNCS LGALDQACVP SPGRRQAQAA PSQGHKSFRV VHRRQMGLSN PFRGLMKLGT VERRGAMGIW KELFCELSPL EFRLYLSNEE HTCVENCSLL RCESVGPAHS DGRFELVFSG KKLALRASSQ DEAEDWLDRV REALQKVRPQ QEDEWVNVQY PDQPEEPPEA PQGCLSPSDL </p>

LSEPAALQGT QFDWSSAQVP EPDAIKESLL YLYMDRTWMP YIFSLSLEAL KCFRIRNNEK
MLSDSHGVET IRDILPDTSL GGPSFFKIIT AKAVLKLQAG NAEAAALWRD LVRKVLASYL
ETAEAAVTLG GSLDENCQEV LKFATRENGF LLQYLVAIPM EKGLDSQGCF CAGCSRQIGF
SFVRPKLCAF SGLYYCDICH QDDASVIPAR IHNWDLTKR PICRQALKFL TQIRAQPLIN
LQMVNASLYE HVERMHLIGR RREQLKLLGD YLGLCRSGAL KELSKRLNHR NYLLESPHRF
SVADLQQIAD GVEGFLKAL IEFASQHVYH CDLCTQRGFI CQICQHHDII FPFEDTTVR
CAECKTVFHQ SCQAVVKKGC PRCARRRKYQ EQNIFA

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 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!

Concentration:

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

Product Details

- 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) (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-le^x-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

Target Details

UniProt: [Q9Y4G2](#)

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 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.

Expiry Date: 12 months