

Datasheet for ABIN3094582

PLEKHM1 Protein (AA 1-1056) (His tag)[Go to Product page](#)**1** Image

Overview

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| Quantity: | 1 mg |
| Target: | PLEKHM1 |
| Protein Characteristics: | AA 1-1056 |
| Origin: | Human |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This PLEKHM1 protein is labelled with His tag. |
| Application: | ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS) |

Product Details

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| Sequence: | MLSVVENGLD PQAAIPVIKK KLVGSVKALQ KQYVSLDTVV TSEDGDANTM CSALEAVFIH GLHAKHIRAE AGGKRKSAH QKPLPQPFW PLLKAVTHKH IISELEHLTF VNTDVGR CRA WLRALNDGL MECYLKLLQ EQARLHEYQ PTALLRDAEE GEFLLSFLQG LTSLSFELSY KSAILNEWTL TPLALSGLCP LSELDPLSTS GAELQRKESL DSISHSSGSE DIEVHHSGHK IRRNQKL TAS SLSLDTASSS QLSCSLNSDS CLLQENGSKS PDHCEPMSC DSDLGTANAE DSDRSLQEV LFSKAQVNS VPTNGLSQET EIPTQASLS LHGLNTSTYL HCEAPAEPLP AQAASGTQDG VHVQEPRPQA PSPLDLQQPV ESTSGQPSS 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 LSEPAALQGT QFDWSSAQVP EPDAIKESLL YLYMDRTWMP YIFSLSLEAL KCFRIRNNEK |
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MLSDSHGVET IRDILPDTSL GGPSFFKIIT AKAVLKLQAG NAEAAALWRD LVRKVLASYL
ETAEAAVTLG GSLDENCQEV LKFATRENGF LLQYLVAIPM EKGLDSQGCF CAGCSRQIGF
SFVRPKLCAF SGLYYCDICH QDDASVIPAR IHNWDLTKR PICRQALKFL TQIRAQPLIN
LQMVNASLYE HVERMHLIGR RREQLKLLGD YLGLCRSGAL KLSKRLNHR NYLLESPHRF
SVADLQIAD GVYEGFLKAL IEFASQHVYH CDLCTQRGFI CQICQHHDII FPFEEDTTVR
CAECKTVFHQ SCQAVVKKGC PRCARRRKYQ EQNIFA

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human PLEKHM1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Product Details

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| Purity: | >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. |
| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | Protein is endotoxin free. |
| Grade: | Crystallography grade |

Target Details

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| Target: | PLEKHM1 |
| Alternative Name: | PLEKHM1 (PLEKHM1 Products) |
| Background: | <p>Proposed to act 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. Required for late stages of endolysosomal maturation, facilitating both endocytosis-mediated degradation of growth factor receptors and autophagosome clearance. Seems to be involved in the terminal maturation of autophagosomes and to mediate autophagosome-lysosome fusion (PubMed:25498145). Involved in vesicular transport in the osteoclast (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). 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 (PubMed:25500191). {ECO:0000250 UniProtKB:Q5PQS0, ECO:0000269 PubMed:12820725, ECO:0000269 PubMed:20943950, ECO:0000269 PubMed:25498145, ECO:0000269 PubMed:25500191, ECO:0000305}.</p> |
| Molecular Weight: | 118.4 kDa Including tag. |
| UniProt: | Q9Y4G2 |

Application Details

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| 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: | In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to |

Application Details

increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

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| Format: | Liquid |
| Buffer: | 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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: | Unlimited (if stored properly) |

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process