

Datasheet for ABIN3135493 PIM2 Protein (AA 1-370) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	PIM2
Protein Characteristics:	AA 1-370
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIM2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: MARATNLNAA PSAGASGPPD SLPSTLAPPS PGSPAALPRA STPCGLSGFS GLNIRSTSSM
LTKPLQGHPS PPVTPTQPPG GKDRAAFEAE YRLGPLLGKG GFGTVFAGHR VTDRRQVAIK
VISNRNVLGW STVSDSVTCP LEVALLWKVG EGNHHPGVIR LLDWFETPEG FMLVLERPMP
AQDLFDYITE KGPLGESCSR SFFTQVVAHV QHCHARGVVH RDIKDENILI DLCRGSIKLI
DFGSGALLHD EPTYDFDGTR VYSPPEWISR HQYHALPATV WSLGVLLYDM VCGDIPFERD
QEILEAELHF PAHVSPDCCA LIRRCLAPKP CSRPSLEEIL LDPWMQSPAE EKPINSSKGS
PTPLPWLLP

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.
 - Mouse Pim2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.

Product Details

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

Target:	PIM2
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Alternative Name:	Pim2 (PIM2 Products)
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Target Details

Background:	Proto-oncogene with serine/threonine kinase activity involved in cell survival and cell proliferation. Exerts its oncogenic activity through: the regulation of MYC transcriptional activity, the regulation of cell cycle progression, the regulation of cap-dependent protein translation and through survival signaling by phosphorylation of a pro-apoptotic protein, BAD. Phosphorylation of MYC leads to an increase of MYC protein stability and thereby an increase of transcriptional activity. The stabilization of MYC exerted by PIM2 might explain partly the strong synergism between these 2 oncogenes in tumorigenesis. Regulates cap-dependent protein translation in a mammalian target of rapamycin complex 1 (mTORC1)-independent manner and in parallel to the PI3K-Akt pathway. Mediates survival signaling through phosphorylation of BAD, which induces release of the anti-apoptotic protein Bcl-X(L)/BCL2L1. Promotes cell survival in response to a variety of proliferative signals via positive regulation of the I-kappa-B kinase/NF-kappa-B cascade, this process requires phosphorylation of MAP3K8/COT. Promotes growth factor-independent proliferation by phosphorylation of cell cycle factors such as CDKN1A and CDKN1B. Involved in the positive regulation of chondrocyte survival and autophagy in the epiphyseal growth plate. {ECO:0000269 PubMed:12869584, ECO:0000269 PubMed:12954615, ECO:0000269 PubMed:15199164, ECO:0000269 PubMed:15548703, ECO:0000269 PubMed:15705789, ECO:0000269 PubMed:17476689, ECO:0000269 PubMed:18438430, ECO:0000269 PubMed:9294606}.
Molecular Weight:	41.0 kDa Including tag.
UniProt:	Q62070

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:	Protein has not been tested for activity yet. 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 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

Format:	Liquid
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Handling

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