

Datasheet for ABIN3135731 PAXIP1 Protein (AA 1-1056) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	PAXIP1
Protein Characteristics:	AA 1-1056
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAXIP1 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MSEPAPEVPE ELFREVKYIA VGDIDPQVIQ LLKAGKAKEV SYNALASHII SEDGDNPEVG</p> <p>EAREVFDLPV VKPSWVTLVS QCGALLPVNG FSPESCQIFF GLTACLSQVS SEDRSALWAL</p> <p>VTFHGGSCQL NLNKKCTHLI VPEPKGEKYE RAVKRTSIKI VTPDWVLDCV SEKRRKDEAF</p> <p>YHPRLIIYEE EEEEEEEGDN EEQDSQNEGS TEKSSVASSA VASPAEQPCS PKPRAEVSKG</p> <p>ELMFDDSSDS SPEKQERSLN WAPAEAPPLN TAQRRLPQGK GPGLINLCAN VPPVPGDILP</p> <p>PDMRGNLMAP GQNLQNSERS EILGTWSPAV RTLRNITNNA DIQQINRPSN VAHILQSLSA</p> <p>PTKSLEQQVA RGQQGHPNAS AVLFGQAKGA PETHVLQQHH PPQQPQQQHP ALHLQPQIMQ</p> <p>LQQQQQQQQQ QQQQPQPYPQ PPSHQFPQQV HGHQFSQQQL QFPQQPLHPQ QQLHRPQQQL</p> <p>QPFQQQHALQ QQLHQLQQQQ LQHHQLAQLQ QQQQQQHNLQ QQQQQQQQLQ RLQQQQQMQR</p> <p>QAAHLSQASQ ALQHQLVLPQ PLQLSLQPPP QQQQQQQLFG HDPAVEIPEE SFLGCVFAI</p> <p>ADYPEQMSDK QLLATWKRII QAHGGTVDPD FTSRCTHLLC ASQVSSMYTQ ALRERKRCVT</p> <p>AHWLNTVLKK KKLMPPHRAL HFPVAFPPGG KPCSQHIISV TGFVDNDRDD LKLMAYLAGA</p>
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KYTGylCRSN TVLICKEPSG LKYEKAKEWR IPCVNAQWLG DILLGNFEAL RQVQYSRYTA
FNMPDPFVPT PHLVLGLLDA WRTPVKVTAE LLMGVRLPPK LKPNEVANIQ PSSKRARIED
LPPPTKKLTP ELTPLVLFTG FEPVQVQQYI KKLYILGGEV AECTKKCTHL IASKVTRTVK
FLTAISVVKH IVTPDWLEEC FKRQTFIDEQ NYILRDAAEAE VLFSFSLEES LKRAHVSPLE
KTKYFYITPG ICPSLATMKA IVECAGGKVL AKQPSFRKLM EHKQNKSLSE IILISCENDL
HLCREYFARG IDVHNAEFVL TGVLTQTLDY ESYKFN

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 Paxip1 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

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

Target:	PAXIP1
Alternative Name:	Paxip1 (PAXIP1 Products)
Background:	<p>Involved in DNA damage response and in transcriptional regulation through histone methyltransferase (HMT) complexes such as the MLL2/MLL3 complex. Plays a role in early development. In DNA damage response is required for cell survival after ionizing radiation. In vitro shown to be involved in the homologous recombination mechanism for the repair of double-strand breaks (DSBs). Its localization to DNA damage foci requires Rnf8 and Ube2n. Recruits Tp53bp1 to DNA damage foci and, at least in particular repair processes, effective DNA damage response appears to require the association with Tp53bp1 phosphorylated by Atm. Together with Tp53bp1 regulates Atm association (By similarity). Proposed to recruit Pargr1 to sites of DNA damage and the Pargr1:Paxip1 complex is required for cell survival in response to DNA damage independently of the MLL2/MLL3 complex. However, this function has been questioned (PubMed:19124460, PubMed:26744420). Promotes ubiquitination of PCNA following UV irradiation and may regulate recruitment of polymerase eta and Rad51 to chromatin after DNA damage. Proposed to be involved in transcriptional regulation by linking MLL-containing histone methyltransferase (HMT) complexes to gene promoters by interacting with promoter-bound transcription factors such as Pax2. Associates with gene promoters that are known to be regulated by Kmt2d/MLL2 (By similarity). During immunoglobulin class switching in activated B-cells is involved in trimethylation of histone H3 at 'Lys-4' and in transcription initiation of downstream switch regions at the immunoglobulin heavy-chain (Igh) locus, this function appears to involve the recruitment of MLL-containing HMT complexes. Conflictingly, its function in transcriptional regulation during immunoglobulin class switching is reported to be independent of the MLL2/MLL3 complex (PubMed:20671152, PubMed:26744420). {ECO:0000250, ECO:0000269 PubMed:10908331, ECO:0000269 PubMed:12588986, ECO:0000269 PubMed:17925232, ECO:0000269 PubMed:19124460, ECO:0000269 PubMed:19414588, ECO:0000269 PubMed:20671152, ECO:0000269 PubMed:26744420}.</p>

Target Details

Molecular Weight:	120.2 kDa Including tag.
UniProt:	Q6NZQ4
Pathways:	Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Production of Molecular Mediator of Immune Response

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
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)



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