Datasheet for ABIN3135731

PAXIP1 Protein (AA 1-1056) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	PAXIP1
Protein Characteristics:	AA 1-1056
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAXIP1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence:	MSEPAPEVPE ELFREVKYYA VGDIDPQVIQ LLKAGKAKEV SYNALASHII SEDGDNPEVG EAREVFDLPV VKPSWVTLSV QCGALLPVNG FSPESCQIFF GLTACLSQVS SEDRSALWAL VTFHGGSCQL NLNKKCTHLI VPEPKGEKYE RAVKRTSIKI VTPDWVLDCV SEKRRKDEAF YHPRLIIYEE EEEEEEEGDN EEQDSQNEGS TEKSSVASSA VASPAEQPCS PKPRAEVSKG ELMFDDSSDS SPEKQERSLN WAPAEAPPLN TAQRRLPQGK GPGLINLCAN VPPVPGDILP PDMRGNLMAP GQNLQNSERS EILGTWSPAV RTLRNITNNA DIQQINRPSN VAHILQSLSA PTKSLEQQVA RGQQGHPNAS AVLFGQAKGA PETHVLQQHH PPQQPQQQHP ALHLQPQIMQ LQQQQQQQQQ QQQQPQPYPQ PPSHQFPQQV HQHQFSQQQL QFPQQPLHPQ QQLHRPQQQL QPFQQQHALQ QQLHQLQQQQ LQHHQLAQLQ QQQQQQHNLL QQQQQQQQLQ RLQQQQQMQN QAAHLSQASQ ALQHQVLPQQ PLQLSLQPPP QQQQQQQLFG HDPAVEIPEE SFLLGCVFAI ADYPEQMSDK QLLATWKRII QAHGGTVDPT FTSRCTHLLC ASQVSSMYTQ ALRERKRCVT AHWLNTVLKK KKLMPPHRAL HFPVAFPPGG KPCSQHIISV TGFVDNDRDD LKLMAYLAGA

KYTGYLCRSN TVLICKEPSG LKYEKAKEWR IPCVNAQWLG DILLGNFEAL RQVQYSRYTA FNMPDPFVPT PHLVLGLLDA WRTPVKVTAE LLMGVRLPPK LKPNEVANIQ PSSKRARIED LPPPTKKLTP ELTPLVLFTG FEPVQVQQYI KKLYILGGEV AECTKKCTHL IASKVTRTVK FLTAISVVKH IVTPDWLEEC FKRQTFIDEQ NYILRDAEAE VLFSFSLEES LKRAHVSPLF KTKYFYITPG ICPSLATMKA IVECAGGKVL AKQPSFRKLM EHKQNKSLSE IILISCENDL HLCREYFARG IDVHNAEFVL TGVLTQTLDY ESYKFN

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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.
Purity:	≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	PAXIP1
Alternative Name:	Paxip1 (PAXIP1 Products)
Background:	PAX-interacting protein 1 (PAX transactivation activation domain-interacting protein),FUNCTION: 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 Pagr1 to sites of DNA damage and the Pagr1: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

Target Details

	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}.
Molecular Weight:	119.3 kDa
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:	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. If you have a special request,

Handling

	please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

