

## Datasheet for ABIN7554885

# PAXIP1 Protein (AA 1-1069) (His tag)



### Overview

Quantity:	1 mg
Target:	PAXIP1
Protein Characteristics:	AA 1-1069
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAXIP1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat PAXIP1 Protein expressed in mammalien cells.
Sequence:	MSDQAPKVPE EMFREVKYYA VGDIDPQVIQ LLKAGKAKEV SYNALASHII SEDGDNPEVG
	EAREVFDLPV VKPSWVILSV QCGTLLPVNG FSPESCQIFF GITACLSQVS SEDRSALWAL
	VTFYGGDCQL TLNKKCTHLI VPEPKGEKYE CALKRASIKI VTPDWVLDCV SEKTKKDEAF
	YHPRLIIYEE EEEEEEEEE VENEEQDSQN EGSTDEKSSP ASSQEGSPSG DQQFSPKSNT
	EKSKGELMFD DSSDSSPEKQ ERNLNWTPAE VPQLAAAKRR LPQGKEPGLI NLCANVPPVP
	GNILPPEVRG NLMAAGQNLQ SSERSEMIAT WSPAVRTLRN ITNNADIQQM NRPSNVAHIL
	QTLSAPTKNL EQQVNHSQQG HTNANAVLFS QVKVTPETHM LQQQQQAQQQ QQQHPVLHLQ
	PQQIMQLQQQ QQQQISQQPY PQQPPHPFSQ QQQQQQQAHP HQFSQQQLQF PQQQLHPPQQ
	LHRPQQQLQP FQQQHALQQQ FHQLQQHQLQ QQQLAQLQQQ HSLLQQQQQQ QIQQQQLQRM
	HQQQQQQMQ SQTAPHLSQT SQALQHQVPP QQPPQQQQQQ QPPPSPQQHQ LFGHDPAVEI
	PEEGFLLGCV FAIADYPEQM SDKQLLATWK RIIQAHGGTV DPTFTSRCTH LLCESQVSSA

YAQAIRERKR CVTAHWLNTV LKKKKMVPPH RALHFPVAFP PGGKPCSQHI ISVTGFVDSD RDDLKLMAYL AGAKYTGYLC RSNTVLICKE PTGLKYEKAK EWRIPCVNAQ WLGDILLGNF EALRQIQYSR YTAFSLQDPF APTQHLVLNL LDAWRVPLKV SAELLMSIRL PPKLKQNEVA NVQPSSKRAR IEDVPPPTKK LTPELTPFVL FTGFEPVQVQ QYIKKLYILG GEVAESAQKC THLIASKVTR TVKFLTAISV VKHIVTPEWL EECFRCQKFI DEQNYILRDA EAEVLFSFSL EESLKRAHVS PLFKAKYFYI TPGICPSLST MKAIVECAGG KVLSKQPSFR KLMEHKQNSS LSEIILISCE NDLHLCREYF ARGIDVHNAE FVLTGVLTQT LDYESYKFN Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a

#### Characteristics:

Key Benefits:

special request, please contact us.

- Made to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

#### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

custom-made

#### **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. 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 at 'Ser-25'. Together with TP53BP1 regulates ATM association. Proposed to recruit PAGR1 to sites of DNA damage and the PAGR1:PAXIP1 complex is required for cell survival in response to DNA damage, the function is probably independent of MLL-containing histone methyltransferase (HMT) complexes. However, this function has been questioned (By similarity). 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. 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 (By similarity). {ECO:0000250|UniProtKB:Q6NZQ4, ECO:0000269|PubMed:14576432, ECO:0000269|PubMed:15456759, ECO:0000269|PubMed:17690115, ECO:0000269|PubMed:17925232, ECO:0000269|PubMed:18353733, ECO:0000269|PubMed:20088963, ECO:0000269|PubMed:23727112}.

Molecular	Weight:
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121.3 kDa

UniProt:

Q6ZW49

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.

Restrictions:

For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months