

Datasheet for ABIN7564005 FNIP1 Protein (AA 1-1165) (His tag)



Overview

Quantity:	1 mg
Target:	FNIP1
Protein Characteristics:	AA 1-1165
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FNIP1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Fnip1 Protein expressed in mammalien cells.
Sequence:	MAPTLFQKLF SKRSGLGAPG RDARDPDCAF SWPLPEFDPS QIRLIVYQDC ERRGRNVLFD
	SSVKRKNEDT SVSKLCNDAQ VKVFGKCCQL KPGGDSSSSL DSSITLSSDG KDQCPKYQGS
	RCSSDANMLG EMMFGSVAMS YKGSTLKIHQ IRSPPQLMLS KVFTARTGSS ICGSLNTLQD
	SLEFINQDSN TLKADSSTVS NGLLGNIGLS QFCSPRRAFS EQGPLRLIRS ASFFAVHSNP
	MDMPGRELNE DRDSGIARSA SLSSLFITPF PSPNSSLTRS CASSYQRRWR RSQTTSLENG
	VFPRWSVEES FNLSDESCGP NPGIVRKKKI AIGVIFSLSK DEDENNKFNE FFFSHFPLFE
	SHMNKLKSAI EQAMKMSRRS ADASQRSLAY NRILDALTEF RTTICNLYTM PRIGEPVWLT
	MMSGTPEKNQ LCHRFMKEFT FLMENASKNQ FLPALITAVL TNHLAWVPTV MPNGQPPIKI
	FLEKHSSQSV GMLAKTHPYN PLWAQLGDLY GAIGSPVRLA RTVVVGKRQD LVQRLLYFLT
	YFIRCSELQE THLLENGEDE AIVMPGTVIT TTLEKGEIEE SEYVLITMHR NKSSLLFKES
	EETRTPNCNC KYCSHPVLGQ NTENVSQPER EDTQDNSKEL LGISDECQKI SPPDCQEENA

VDVQQYRDKL RTCLDTKLET VVCTGSAPAD KCVLSETCLE PREESWQNKE LLDSDNHTGT
AMRPTGIVVE KKPPDKNVPS AFSCEVTQTK VTFLIGDSMS PDSDTELRSQ AVVDQINRHH
SEPLKEDRGV ADKHQESKIT KDQSEDSDTQ NIVSGESCEL PCWSHSDPES MSLFDEYFND
DSIETRTIDD VPVKTSTDSK EYCCMLEYPK RLYTKTNKQK SELCKCIETV HQDSCNACFP
QQDQRNSLSI LVPHGDKESS DKKNAVGTEW DIPRNESSDS ALGDSESEDT GPDIRRQAGG
YCGGDQEDWT EEDEIPFPGS KLIEVSAVQP NIANFGRSLL GGYCSSYVPD FVLQGIGNDE
RLRQCLVSDL SHAVQHPVLD EPIAEAVCII ADMDKWTVQV ASSQRRVTDN KLGKEVLVSS
LVSNLLHSTL QLYKHNLSPN FCVMHLEDRL QELYFKSKML SEYLRGQMRV HVKELGVVLG
IESSDLPLLA AVASTHSPYV AQILL 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 special request, please contact us.

Characteristics:

Key Benefits:

- 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:	FNIP1
Alternative Name:	Fnip1 (FNIP1 Products)
Background:	Folliculin-interacting protein 1,FUNCTION: Binding partner of the GTPase-activating protein
	FLCN: involved in the cellular response to amino acid availability by regulating the non-

canonical mTORC1 signaling cascade controlling the MiT/TFE factors TFEB and TFE3 (PubMed:23582324). Required to promote FLCN recruitment to lysosomes and interaction with Rag GTPases, leading to activation of the non-canonical mTORC1 signaling (By similarity). In low-amino acid conditions, component of the lysosomal folliculin complex (LFC) on the membrane of lysosomes, which inhibits the GTPase-activating activity of FLCN, thereby inactivating mTORC1 and promoting nuclear translocation of TFEB and TFE3 (By similarity). Upon amino acid restimulation, disassembly of the LFC complex liberates the GTPaseactivating activity of FLCN, leading to activation of mTORC1 and subsequent inactivation of TFEB and TFE3 (By similarity). Together with FLCN, regulates autophagy: following phosphorylation by ULK1, interacts with GABARAP and promotes autophagy (By similarity). In addition to its role in mTORC1 signaling, also acts as a co-chaperone of HSP90AA1/Hsp90: following gradual phosphorylation by CK2, inhibits the ATPase activity of HSP90AA1/Hsp90, leading to activate both kinase and non-kinase client proteins of HSP90AA1/Hsp90 (By similarity). Acts as a scaffold to load client protein FLCN onto HSP90AA1/Hsp90 (By similarity). Competes with the activating co-chaperone AHSA1 for binding to HSP90AA1, thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins (By similarity). Also acts as a core component of the reductive stress response by inhibiting activation of mitochondria in normal conditions: in response to reductive stress, the conserved Cys degron is reduced, leading to recognition and polyubiquitylation by the CRL2(FEM1B) complex, followed by proteasomal (PubMed:32941802). Required for B-cell development (PubMed:22709692, PubMed:27303042). {ECO:0000250|UniProtKB:Q8TF40, ECO:0000250|UniProtKB:Q9P278, ECO:0000269|PubMed:22709692, ECO:0000269|PubMed:23582324, ECO:0000269|PubMed:27303042, ECO:0000269|PubMed:32941802}.

Molecular Weight:

130.1 kDa

UniProt:

Q68FD7

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

Handling

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