Datasheet for ABIN7553939

FNIP1 Protein (AA 1-1166) (His tag)

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Overview

Quantity:	1 mg
Target:	FNIP1
Protein Characteristics:	AA 1-1166
Origin:	Human
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 SKRTGLGAPG RDARDPDCGF SWPLPEFDPS QIRLIVYQDC ERRGRNVLFD SSVKRRNEDI SVSKLGSDAQ VKVFGKCCQL KPGGDSSSSL DSSVTSSSDI KDQCLKYQGS RCSSDANMLG EMMFGSVAMS YKGSTLKIHQ IRSPPQLMLS KVFTARTGSS ICGSLNTLQD SLEFINQDNN TLKADNNTVI NGLLGNIGLS QFCSPRRAFS EQGPLRLIRS ASFFAVHSNP MDMPGRELNE DRDSGIARSA SLSSLLITPF PSPNSSLTRS CASSYQRRWR RSQTTSLENG VFPRWSIEES FNLSDESCGP NPGIVRKKKI AIGVIFSLSK DEDENNKFNE FFFSHFPLFE SHMNKLKSAI EQAMKMSRRS ADASQRSLAY NRIVDALNEF RTTICNLYTM PRIGEPVWLT MMSGTPEKNH LCYRFMKEFT FLMENASKNQ FLPALITAVL TNHLAWVPTV MPNGQPPIKI FLEKHSSQSV DMLAKTHPYN PLWAQLGDLY GAIGSPVRLA RTVVVGKRQD MVQRLLYFLT YFIRCSELQE THLLENGEDE AIVMPGTVIT TTLEKGEIEE SEYVLVTMHR NKSSLLFKES EEIRTPNCNC KYCSHPLLGQ NVENISQQER EDIQNSSKEL LGISDECQMI SPSDCQEENA

Product Details

	VDVKQYRDKL RTCFDAKLET VVCTGSVPVD KCALSESGLE STEETWQSEK LLDSDSHTGK AMRSTGMVVE KKPPDKIVPA SFSCEAAQTK VTFLIGDSMS PDSDTELRSQ AVVDQITRHH TKPLKEERGA IDQHQETKQT TKDQSGESDT QNMVSEEPCE LPCWNHSDPE SMSLFDEYFN DDSIETRTID DVPFKTSTDS KDHCCMLEFS KILCTKNNKQ NNEFCKCIET VPQDSCKTCF PQQDQRDTLS ILVPHGDKES SDKKIAVGTE WDIPRNESSD SALGDSESED TGHDMTRQVS SYYGGEQEDW AEEDEIPFPG SKLIEVSAVQ PNIANFGRSL LGGYCSSYVP DFVLQGIGSD ERFRQCLMSD LSHAVQHPVL DEPIAEAVCI IADMDKWTVQ VASSQRRVTD NKLGKEVLVS SLVSNLLHST LQLYKHNLSP NFCVMHLEDR LQELYFKSKM LSEYLRGQMR VHVKELGVVL GIESSDLPLL AAVASTHSPY VAQILL **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-

Target Details

	canonical mTORC1 signaling cascade controlling the MiT/TFE factors TFEB and TFE3 (PubMed:17028174, PubMed:18663353, PubMed:24081491, PubMed:37079666). Required to promote FLCN recruitment to lysosomes and interaction with Rag GTPases, leading to activation of the non-canonical mTORC1 signaling (PubMed:24081491). 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 GTPase-activating activity of FLCN, leading to activation of mTORC1 and subsequent inactivation of TFEB and TFE3 (PubMed:37079666). Together with FLCN, regulates autophagy: following phosphorylation by ULK1, interacts with GABARAP and promotes autophagy (PubMed:25126726). 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 (PubMed:27353360, PubMed:30699359). Acts as a scaffold to load client protein FLCN onto HSP90AA1/Hsp90 (PubMed:27353360). Competes with the activating co-chaperone AHSA1 for binding to HSP90AA1, thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins (PubMed:27353360). 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 (By similarity). Required for B-cell development (PubMed:32905580). {ECO:0000250|UniProtKB:Q68FD7, ECO:0000250|UniProtKB:Q9P278, ECO:0000269|PubMed:17028174, ECO:0000269|PubMed:18663353, ECO:0000269|PubMed:24081491, ECO:0000269|PubMed:25126726, ECO:0000269|PubMed:27353360, ECO:0000269|PubMed:30699359, ECO:0000269|PubMed:32905580, ECO:0000269|PubMed:37079666}.
Molecular Weight:	130.6 kDa
UniProt:	Q8TF40

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.

Application Details

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

