

Datasheet for ABIN7564227  
**FNIP2 Protein (AA 1-1108) (His tag)**



[Go to Product page](#)

## Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 1 mg   |
| Target:                       | FNIP2  |
| Protein Characteristics:      | AA 1-1108                                    |
| Origin:                       | Mouse  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This FNIP2 protein is labelled with His tag. |
| Application:                  | SDS-PAGE (SDS), Western Blotting (WB)        |

## Product Details

|           |  |
|-----------|--|
| Purpose:  | Custom-made recombinat Fnip2 Protein expressed in mammalien cells.   |
| Sequence: | <p>MAPTLLQKLF NKRGGGAASA QARPPKEEPA FSWSCSEFGL SDIRLLVYQD CERRGRQVMF<br/>DSRAVQKMEE AAAQKAEDVP IKMSARCCQE SSSSSGSSSS GSSSSHGFGG SLQHAKQLP<br/>KYQYTRPASD VSMLGEMMFG SVAMSYKGST LKIHYIRSPQ QLMISKVFSA TMGSFCGSTN<br/>NLQDSFEYIN QDPQAGKLNQ NQYNLGPFRG GSNLAHSTPV DMPARGQNEQ RDSGIARSAS<br/>LSSLLITPPF SPSSSTSSSS SYQRRWLRSQ TTSLENGIFP RRSTDETFSL AEETCSSNPA<br/>MVRKRIKIAIS IIFSLCEREA AQRDFQDFFF SHFPLFESHM NRLKGAIEKA MISCRKISES<br/>SLRVQFYVSR LMEALGEFRG TIWNLYSVPR IAEPVWLTMM SNTLEKNQLC QRFLKEFILL<br/>IEQVKNQFF AALLTAVLTY HLAWVPTVMP VDHPPKAFS EKRTSQSVNM LAKTHPYNPL<br/>WAQLGDLYGA IGSPVRLTRT VVIGKQKDLV QRILYVLTYP LRCSELQENQ LSWSGNPNSE<br/>DQVINGSKII TALEKGEVEE SEYVVVTVSS EPALVPPILP QGTAERRSPE PTVVAEISEG<br/>VNTSELGHKP EKNRCKRPEQ NSEASSMGFQ EAEPDSSWIP QGIFCEDKQN DQEATQDCSS</p> |

## Product Details

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SPPSCEVPRV RRRMDQQLH SKLHGETLKK RAEQSAAWPC PDRHSQEDPP VEKVTFHIGS  
SISPESDFES RTKRMEERLK ACGHFHGASA SASSSMDTGL TQEQQSGGCS FKADFEKDIT  
PQDHSSGGEG VSEDRGLRAN MTHAVGQLSQ VDGPLAHS LC AAESGRRLLE QTRDVQLKGY  
KGPSSEPVPN RCRQQGGLLI AADVPGDAS GKGNYRSEGD IPRNESLDSA LGDSDDEACV  
LALLELGHSC DRTEESLEVE LPLPRSQSTS KANVRNFGRS LLAGYCATYM PDLVLHGTSS  
DEKLLKQCLAA DLVHTVHHPV LDEPIAEAVC IADTDKWTV QVATSQRKVT DTMKLGQDVL  
VSSQVSSLLQ SILQLYKLHL PADFCIMHLE DRLQEMYLKS KMLSEYLRGH TRVHVKELSV  
VLGIESNDLP LLTIASTHS PYVAQILL **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.**

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### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian 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.

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

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Grade: custom-made

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## Target Details

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Target: FNIP2

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Alternative Name: Fnip2 ([FNIP2 Products](#))

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Background: Folliculin-interacting protein 2 (O6-methylguanine-induced apoptosis 1 protein),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

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## Target Details

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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 GTPase-activating 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: 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). May play a role in the signal transduction pathway of apoptosis induced by O6-methylguanine-mispaired lesions (PubMed:19137017). {ECO:0000250|UniProtKB:Q8TF40, ECO:0000250|UniProtKB:Q9P278, ECO:0000269|PubMed:19137017, ECO:0000269|PubMed:23582324}.

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Molecular Weight: 122.5 kDa

UniProt: [Q80TD3](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Buffer: The buffer composition is at the discretion of the manufacturer.

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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## Handling

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months