

Datasheet for ABIN3096409

XIAP Protein (AA 1-497) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	XIAP
Protein Characteristics:	AA 1-497
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This XIAP protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence: MTFNSFEGSK TCVPADINKE EEFVEEFNRL KTFANFPSGS PVSASTLARA GFLYTGEEDT
VRCFSCHAAV DRWQYGDSAV GRHRKVSPNC RFINGFYLEN SATQSTNSGI QNGQYKVENY
LGSRDHFALD RPSETHADYL LRTGQVVDIS DTIYPRNPAM YSEEARLKSF QNWPDYAHLT
PRELASAGLY YTGIGDQVQC FCCGGKLKNW EPCDRAWSEH RRHFPNCFFV LGRNLNIRSE
SDAVSSDRNF PNSTNLPRNP SMADYEARIF TFGTWIYSVN KEQLARAGFY ALGEGDKVKC
FHCGGGLTDW KPSEDPWEQH AKWYPGCKYL LEQKGQEYIN NIHLTHSLEE CLVRTTEKTP
SLTRRIDDTI FQNPMVQEI RMGFSFKDIK KIMEEKIQIS GSNYKSLEVL VADLVNAQKD
SMQDESSQTS LQKEISTEEQ LRRLQEEKLC KICMDRNIAI VFVPCGHLVT CKQCAEAVDK
CPMCYTVITF KQKIFMS

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.
- 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

Product Details

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)
Grade:	Crystallography grade

Target Details

Target:	XIAP
Alternative Name:	XIAP (XIAP Products)
Background:	<p>E3 ubiquitin-protein ligase XIAP (EC 2.3.2.27) (Baculoviral IAP repeat-containing protein 4) (IAP-like protein) (ILP) (hILP) (Inhibitor of apoptosis protein 3) (IAP-3) (hIAP-3) (hIAP3) (RING-type E3 ubiquitin transferase XIAP) (X-linked inhibitor of apoptosis protein) (X-linked IAP),FUNCTION: Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, copper homeostasis, mitogenic kinase signaling, cell proliferation, as well as cell invasion and metastasis (PubMed:11447297, PubMed:12121969, PubMed:9230442, PubMed:11257230, PubMed:11257231, PubMed:12620238, PubMed:17967870, PubMed:19473982, PubMed:20154138, PubMed:22103349, PubMed:17560374). Acts as a direct caspase inhibitor (PubMed:11257230, PubMed:11257231, PubMed:12620238). Directly bind to the active site pocket of CASP3 and CASP7 and obstructs substrate entry (PubMed:11257230, PubMed:11257231, PubMed:16352606, PubMed:16916640). Inactivates CASP9 by keeping it in a monomeric, inactive state (PubMed:12620238). Acts as an E3 ubiquitin-protein ligase regulating NF-kappa-B signaling and the target proteins for its E3 ubiquitin-protein ligase activity include: RIPK1, RIPK2, MAP3K2/MEKK2, DIABLO/SMAC, AIFM1, CCS, PTEN and BIRC5/survivin (PubMed:17967870, PubMed:19473982, PubMed:20154138, PubMed:22103349, PubMed:22607974, PubMed:30026309, PubMed:29452636, PubMed:17560374). Acts as an important regulator of innate immunity by mediating 'Lys-63'-linked polyubiquitination of RIPK2 downstream of NOD1 and NOD2, thereby transforming RIPK2 into a scaffolding protein for downstream effectors, ultimately leading to activation of the NF-kappa-B and MAP kinases signaling (PubMed:19667203, PubMed:22607974, PubMed:30026309, PubMed:29452636). 'Lys-63'-linked polyubiquitination of RIPK2 also promotes recruitment of the LUBAC complex to RIPK2 (PubMed:22607974, PubMed:29452636). Regulates the BMP signaling pathway and the SMAD and MAP3K7/TAK1 dependent pathways leading to NF-kappa-B and JNK activation (PubMed:17560374). Ubiquitination of CCS leads to enhancement of its chaperone activity</p>

Target Details

toward its physiologic target, SOD1, rather than proteasomal degradation (PubMed:20154138). Ubiquitination of MAP3K2/MEKK2 and AIFM1 does not lead to proteasomal degradation (PubMed:17967870, PubMed:22103349). Plays a role in copper homeostasis by ubiquitinating COMMD1 and promoting its proteasomal degradation (PubMed:14685266). Can also function as E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation (PubMed:21145488). Ubiquitinates and therefore mediates the proteasomal degradation of BCL2 in response to apoptosis (PubMed:29020630). Protects cells from spontaneous formation of the ripoptosome, a large multi-protein complex that has the capability to kill cancer cells in a caspase-dependent and caspase-independent manner (PubMed:22095281). Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8 (PubMed:22095281). Acts as a positive regulator of Wnt signaling and ubiquitinates TLE1, TLE2, TLE3, TLE4 and AES (PubMed:22304967). Ubiquitination of TLE3 results in inhibition of its interaction with TCF7L2/TCF4 thereby allowing efficient recruitment and binding of the transcriptional coactivator beta-catenin to TCF7L2/TCF4 that is required to initiate a Wnt-specific transcriptional program (PubMed:22304967). {ECO:0000269|PubMed:11257230, ECO:0000269|PubMed:11257231, ECO:0000269|PubMed:11447297, ECO:0000269|PubMed:12121969, ECO:0000269|PubMed:12620238, ECO:0000269|PubMed:14685266, ECO:0000269|PubMed:16352606, ECO:0000269|PubMed:16916640, ECO:0000269|PubMed:17560374, ECO:0000269|PubMed:17967870, ECO:0000269|PubMed:19473982, ECO:0000269|PubMed:19667203, ECO:0000269|PubMed:20154138, ECO:0000269|PubMed:21145488, ECO:0000269|PubMed:22103349, ECO:0000269|PubMed:22304967, ECO:0000269|PubMed:22607974, ECO:0000269|PubMed:29020630, ECO:0000269|PubMed:29452636, ECO:0000269|PubMed:30026309, ECO:0000269|PubMed:9230442, ECO:0000303|PubMed:22095281}.

Molecular Weight:	56.7 kDa
UniProt:	P98170
Pathways:	Apoptosis , Caspase Cascade in Apoptosis , Transition Metal Ion Homeostasis

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.
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Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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, 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)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process