Datasheet for ABIN7552510

BAT3 Protein (AA 1-1132) (His tag)

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Overview

Quantity:	1 mg
Target:	BAT3
Protein Characteristics:	AA 1-1132
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BAT3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant BAG6 Protein expressed in mammalian cells.
Sequence:	MEPNDSTSTA VEEPDSLEVL VKTLDSQTRT FIVGAQMNVK EFKEHIAASV SIPSEKQRLI YQGRVLQDDK KLQEYNVGGK VIHLVERAPP QTHLPSGASS GTGSASATHG GGSPPGTRGP GASVHDRNAN SYVMVGTFNL PSDGSAVDVH INMEQAPIQS EPRVRLVMAQ HMIRDIQTLL SRMETLPYLQ CRGGPQPQHS QPPPQPPAVT PEPVALSSQT SEPVESEAPP REPMEAEEVE ERAPAQNPEL TPGPAPAGPT PAPETNAPNH PSPAEYVEVL QELQRLESRL QPFLQRYYEV LGAAATTDYN NNHEGREEDQ RLINLVGESL RLLGNTFVAL SDLRCNLACT PPRHLHVVRP MSHYTTPMVL QQAAIPIQIN VGTTVTMTGN GTRPPPTPNA EAPPPGPGQA SSVAPSSTNV ESSAEGAPPP GPAPPPATSH PRVIRISHQS VEPVVMMHMN IQDSGTQPGG VPSAPTGPLG PPGHGQTLGQ QVPGFPTAPT RVVIARPTPP QARPSHPGGP PVSGTLQGAG LGTNASLAQM VSGLVGQLLM QPVLVAQGTP GMAPPPAPAT ASASAGTTNT ATTAGPAPGG PAQPPPTPQP SMADLQFSQL LGNLLGPAGP GAGGSGVASP TITVAMPGVP AFLQGMTDFL QATQTAPPPP PPPPPPPPAP EQQTMPPPGS PSGGAGSPGG LGLESLSPEF FTSVVQGVLS SLLGSLGARA

Product Details

	GSSESIAAFI QRLSGSSNIF EPGADGALGF FGALLSLLCQ NFSMVDVVML LHGHFQPLQR LQPQLRSFFH QHYLGGQEPT PSNIRMATHT LITGLEEYVR ESFSLVQVQP GVDIIRTNLE FLQEQFNSIA AHVLHCTDSG FGARLLELCN QGLFECLALN LHCLGGQQME LAAVINGRIR RMSRGVNPSL VSWLTTMMGL RLQVVLEHMP VGPDAILRYV RRVGDPPQPL PEEPMEVQGA ERASPEPQRE NASPAPGTTA EEAMSRGPPP APEGGSRDEQ DGASAETEPW AAAVPPEWVP IIQQDIQSQR KVKPQPPLSD AYLSGMPAKR RKTMQGEGPQ LLLSEAVSRA AKAAGARPLT SPESLSRDLE APEVQESYRQ QLRSDIQKRL QEDPNYSPQR FPNAQRAFAD DP **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
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.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	BAT3
Alternative Name:	BAG6 (BAT3 Products)
Background:	Large proline-rich protein BAG6 (BAG family molecular chaperone regulator 6) (BCL2-

associated athanogene 6) (BAG-6) (HLA-B-associated transcript 3) (Protein G3) (Protein Scythe),FUNCTION: ATP-independent molecular chaperone preventing the aggregation of misfolded and hydrophobic patches-containing proteins (PubMed:21636303). Functions as part of a cytosolic protein quality control complex, the BAG6/BAT3 complex, which maintains these client proteins in a soluble state and participates in their proper delivery to the endoplasmic reticulum or alternatively can promote their sorting to the proteasome where they undergo degradation (PubMed:20516149, PubMed:21636303, PubMed:21743475, PubMed:28104892). The BAG6/BAT3 complex is involved in the post-translational delivery of tail-anchored/type II transmembrane proteins to the endoplasmic reticulum membrane. Recruited to ribosomes, it interacts with the transmembrane region of newly synthesized tail-anchored proteins and together with SGTA and ASNA1 mediates their delivery to the endoplasmic reticulum (PubMed:20516149, PubMed:20676083, PubMed:28104892, PubMed:25535373). Client proteins that cannot be properly delivered to the endoplasmic reticulum are ubiquitinated by RNF126, an E3 ubiquitin-protein ligase associated with BAG6 and are sorted to the proteasome (PubMed:24981174, PubMed:28104892, PubMed:27193484). SGTA which prevents the recruitment of RNF126 to BAG6 may negatively regulate the ubiquitination and the proteasomal degradation of client proteins (PubMed:23129660, PubMed:25179605, PubMed:27193484). Similarly, the BAG6/BAT3 complex also functions as a sorting platform for proteins of the secretory pathway that are mislocalized to the cytosol either delivering them to the proteasome for degradation or to the endoplasmic reticulum (PubMed:21743475). The BAG6/BAT3 complex also plays a role in the endoplasmic reticulum-associated degradation (ERAD), a quality control mechanism that eliminates unwanted proteins of the endoplasmic reticulum through their retrotranslocation to the cytosol and their targeting to the proteasome. It maintains these retrotranslocated proteins in an unfolded yet soluble state condition in the cytosol to ensure their proper delivery to the proteasome (PubMed:21636303). BAG6 is also required for selective ubiquitin-mediated degradation of defective nascent chain polypeptides by the proteasome. In this context, it may participate in the production of antigenic peptides and play a role in antigen presentation in immune response (By similarity). BAG6 is also involved in endoplasmic reticulum stress-induced pre-emptive quality control, a mechanism that selectively attenuates the translocation of newly synthesized proteins into the endoplasmic reticulum and reroutes them to the cytosol for proteasomal degradation. BAG6 may ensure the proper degradation of these proteins and thereby protects the endoplasmic reticulum from protein overload upon stress (PubMed:26565908). By inhibiting the polyubiquitination and subsequent proteasomal degradation of HSPA2 it may also play a role in the assembly of the synaptonemal complex during spermatogenesis (By similarity). Also positively regulates apoptosis by interacting with and stabilizing the proapoptotic factor AIFM1 (By similarity). By

Target Details

	controlling the steady-state expression of the IGF1R receptor, indirectly regulates the insulin-like growth factor receptor signaling pathway (PubMed:26692333). {ECO:0000250|UniProtKB:Q9Z1R2, ECO:0000269|PubMed:20516149, ECO:0000269|PubMed:20676083, ECO:0000269|PubMed:21636303, ECO:0000269|PubMed:21743475, ECO:0000269|PubMed:23129660, ECO:0000269|PubMed:24981174, ECO:0000269|PubMed:25179605, ECO:0000269|PubMed:26565908, ECO:0000269|PubMed:26692333, ECO:0000269|PubMed:27193484, ECO:0000269|PubMed:28104892}., FUNCTION: Involved in DNA damage-induced apoptosis: following DNA damage, accumulates in the nucleus and forms a complex with p300/EP300, enhancing p300/EP300-mediated p53/TP53 acetylation leading to increase p53/TP53 transcriptional activity (PubMed:17403783). When nuclear, may also act as a component of some chromatin regulator complex that regulates histone 3 'Lys-4' dimethylation (H3K4me2) (PubMed:18765639). {ECO:0000269|PubMed:17403783, ECO:0000269|PubMed:18765639}., FUNCTION: Released extracellularly via exosomes, it is a ligand of the natural killer/NK cells receptor NCR3 and stimulates NK cells cytotoxicity. It may thereby trigger NK cells cytotoxicity against neighboring tumor cells and immature myeloid dendritic cells (DC). {ECO:0000269|PubMed:18055229, ECO:0000269|PubMed:18852879}., FUNCTION: Mediates ricin-induced apoptosis. {ECO:0000269|PubMed:14960581}.
Molecular Weight:	119.4 kDa
UniProt:	P46379

Application Details

Application Notes:	We expect the protein to work for functional studies. 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.

Handling

Expiry Date:	12 months