Datasheet for ABIN3137610

BAT3 Protein (AA 1-1154) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	BAT3
Protein Characteristics:	AA 1-1154
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This BAT3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MEPSDSASTA MEEPDSLEVL VKTLDSQTRT FIVGAQMNVK EFKEHIAASV SIPSEKQRLI YQGRVLQDDK KLQEYNVGGK VIHLVERAPP QTQLPSGASS GTGSASATHG GAPLPGTRGP GASVHDRNAN SYVMVGTFNL PSDGSAVDVH INMEQAPIQS EPRVRLVMAQ HMIRDIQTLL SRMECRGGTQ AQASQPPPQT PQTVASETVA LNSQTSEPVE SEAPPREPME SEEMEERPPT QTPELAPSGP APAGPAPAGP APAPETNAPN HPSPAEHVEV LQELQRLQRR LQPFLQRYCE VLGAAATTDY NNNHEGREED QRLINLVGES LRLLGNTFVA LSDLRCNLAC APPRHLHVVR PMSHYTTPMV LQQAAIPIQI NVGTTVTMTG NGARPPPAPG AEAATPGSAQ ATSLPPSSTT VDSSTEGAPP PGPAPPPASS HPRVIRISHQ SVEPVVMMHM NIQDSGAQPG GVPSAPTGPL GPPGHGQTLG QQVPGFPTAP TRVVIARPTP PQARPSHPGG PPVSGALQGA GLGTNTSLAQ MVSGLVGQLL MQPVLVAQGT PGMAQAQAQA QAQAQAQAQA PAPAPAPAPA PATASASAGT TNTATTAGPA PGGPAQPPPP QPSAADLQFS QLLGNLLGPA GPGAGGPGMA SPTITVAMPG

VPAFLQGMTD FLQASQTAPP PPPPPPPPPP APEQQSTPPP GSPSGGTASP GGLGPESLPP EFFTSVVQGV LSSLLGSLGA RAGSSESIAA FIQRLSGSSN IFEPGADGAL GFFGALLSLL CQNFSMVDVV MLLHGHFQPL QRLQPQLRSF FHQHYLGGQE PTPSNIRMAT HTLITGLEEY VRESFSLVQV QPGVDIIRTN LEFLQEQFNS IAAHVLHCTD SGFGARLLEL CNQGLFECLA LNLHCLGGQQ MELAAVINGR IRRMSRGVNP SLVSWLTTMM GLRLQVVLEH MPVGPDAILR YVRRVGDPPQ TLPEEPMEVQ GAERTSPEPQ RENASPAPGT TAEEAMSRGP PPAPEGGSRD EQDGASADAE PWAAAVPPEW VPIIQQDIQS QRKVKPQPPL SDAYLSGMPA KRRKTMQGEG PQLLLSEAVS RAAKAAGARP LTSPESLSRD LEAPEVQESY RQQLRSDIQK RLQEDPNYSP QRFPNAHRAF ADDP

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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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!

Product Details

	Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, 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 Scythe),FUNCTION: ATP-independent molecular chaperone preventing the aggregation of misfolded and hydrophobic patches-containing proteins (PubMed:18056262, PubMed:18678708, PubMed:20713601). 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:20713601). 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. 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. SGTA which prevents the recruitment of RNF126 to BAG6 may negatively regulate the ubiquitination and the proteasomal degradation of client proteins. 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. 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.

Target Details

	It maintains these retrotranslocated proteins in an unfolded yet soluble state condition in the cytosol to ensure their proper delivery to the proteasome (By similarity). 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 (PubMed:20713601). 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 (By similarity). 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 (PubMed:18678708). Also positively regulates apoptosis by interacting with and stabilizing the proapoptotic factor AIFM1 (PubMed:18056262). By controlling the steady-state expression of the IGF1R receptor, indirectly regulates the insulin-like growth factor receptor signaling pathway (By similarity). {ECO:0000250|UniProtKB:P46379, ECO:0000269|PubMed:18056262, ECO:0000269|PubMed:18678708, ECO:0000269|PubMed:20713601}., 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. When nuclear, may also act as a component of some chromatin regulator complex that regulates histone 3 'Lys-4' dimethylation (H3K4me2). {ECO:0000250|UniProtKB:P46379}., 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:0000250|UniProtKB:P46379}., FUNCTION: May mediate ricin-induced apoptosis. {ECO:0000250|UniProtKB:P46379}.
Molecular Weight:	121.0 kDa
UniProt:	Q9Z1R2

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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from

Application Details

	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!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months