Datasheet for ABIN3136419

ATG14 Protein (AA 1-492) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ATG14
Protein Characteristics:	AA 1-492
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATG14 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MASPSGKGSW TPEAPGFGPR ALARDLVDSV DDAEGLYVAV ERCPLCNTTR RRLTCAKCVQ SGDFVYFDGR DRERFIDKKE RLSQLKNKQE EFQKEVLKAM EGKRLTDQLR WKIMSCKMRI EQLKQTICKG NEEMKKNSEG LLKNKEKNQK LYSRAQRHQE KKEKIQRHNR KLGDLVEKKT IDLKSHYERL ARLRRSHILE LTSIIFPIDE VKTSGRDPAD VSSETDSAMT SSMVSKLAEA RRTTYLSGRW VCDDHNGDTS ISITGPWISL PNNGDYSAYY NWVEEKKTTQ GPDMEHNNPA YTISAALGYA TQLVNIVSHI LDINLPKKLC NSEFCGENLS KQKLTRAVRK LNANILYLCS SQHVNLDQLQ PLHTLRNLMH LVSPRSEHLG RSGPFEVRAD LEESMEFVDP GVAGESDASG DERVSDEETD LGTDWENLPS PRFCDIPSQP VEVSQSQSTQ VSPPIASSSA GGMISSAAAS VTSWFKAYTG HR **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! 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:	ATG14
Alternative Name:	Atg14 (ATG14 Products)
Background:	Beclin 1-associated autophagy-related key regulator (Barkor) (Autophagy-related protein 14-like protein) (Atg14L),FUNCTION: Required for both basal and inducible autophagy (PubMed:19270696, PubMed:19270693). Determines the localization of the autophagy-specific PI3-kinase complex PI3KC3-C1 (By similarity). Plays a role in autophagosome formation and MAP1LC3/LC3 conjugation to phosphatidylethanolamine (PubMed:19270696, PubMed:19270693). Promotes BECN1 translocation from the trans-Golgi network to autophagosomes (By similarity). Enhances PIK3C3 activity in a BECN1-dependent manner. Essential for the autophagy-dependent phosphorylation of BECN1 (By similarity). Stimulates the phosphorylation of BECN1, but suppresses the phosphorylation of PIK3C3 by AMPK (PubMed:23332761). Binds to STX17-SNAP29 binary t-SNARE complex on autophagosomes and primes it for VAMP8 interaction to promote autophagosome-endolysosome fusion (By similarity). Modulates the hepatic lipid metabolism (PubMed:22992773). {ECO:0000250|UniProtKB:Q6ZNE5, ECO:0000269|PubMed:19270693, ECO:0000269|PubMed:19270696, ECO:0000269|PubMed:22992773, ECO:0000269|PubMed:23332761}.
Molecular Weight:	55.4 kDa
UniProt:	Q8CDJ3
Pathways:	Autophagy

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 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

Application Details

	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

