

Datasheet for ABIN3089788

Beclin 1 Protein (AA 1-450) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Beclin 1 (BECN1)
Protein Characteristics:	AA 1-450
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Beclin 1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MEGSKTSNNS TMQVSFVCQR CSQPLKLDTS FKILDRVITQ ELTAPLLTTA QAKPGETQEE ETNSGEEPFI ETPRQDGVSR RFIPPARMMS TESANSFTLI GEASDGGTME NLSRRLKVTG DLFDIMSGQT DVDHPLCEEC TDTLLDQLDT QLNVTENECQ NYKRCLEILE QMNEDDSEQL QMELKELALE EERLIQELED VEKNRKIVAE NLEKVQAEAE RLDQEEAQYQ REYSEFKRQQ LELDDELKSV ENQMRYAQTQ LDKLKKTNVF NATFHIWHSQ QFGTINNFR LGRPSVPVEW NEINAAWGQT VLLHALANK MGLKFQRYRL VPYGNHSYLE SLTDKSKELP LYCSGGLRFF WDNKFHAMV AFLDCVQQFK EEVEKGETRF CLPYRMDVEK GKIEDTGGSG GSYSIKTQFN SEEQWTKALK FMLTNLKWGL AWWSSQFYNK</p> <p>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.</p>

Product Details

Characteristics:	<div>Key Benefits:</div> <ul style="list-style-type: none">• 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). <div>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.</div> <div>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.</div> <div>Expression System:</div> <ul style="list-style-type: none">• 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.• 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! <div>Concentration:</div> <ul style="list-style-type: none">• 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:	Beclin 1 (BECN1)
Alternative Name:	BECN1 (BECN1 Products)
Background:	<p>Beclin-1 (Coiled-coil myosin-like BCL2-interacting protein) (Protein GT197) [Cleaved into: Beclin-1-C 35 kDa, Beclin-1-C 37 kDa],FUNCTION: Plays a central role in autophagy (PubMed:18570871, PubMed:21358617, PubMed:23184933, PubMed:23974797, PubMed:28445460, PubMed:25484083, PubMed:37776275). Acts as a core subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate, different complex forms are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis. Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed:20643123, PubMed:20208530, PubMed:23974797, PubMed:26783301). Essential for the formation of PI3KC3-C2 but not PI3KC3-C1 PI3K complex forms. Involved in endocytosis (PubMed:25275521). Protects against infection by a neurovirulent strain of Sindbis virus (PubMed:9765397). May play a role in antiviral host defense. {ECO:0000269 PubMed:18570871, ECO:0000269 PubMed:20208530, ECO:0000269 PubMed:20643123, ECO:0000269 PubMed:21358617, ECO:0000269 PubMed:23184933, ECO:0000269 PubMed:23974797, ECO:0000269 PubMed:25275521, ECO:0000269 PubMed:25484083, ECO:0000269 PubMed:26783301, ECO:0000269 PubMed:28445460, ECO:0000269 PubMed:37776275, ECO:0000269 PubMed:9765397}., FUNCTION: Beclin-1-C 35 kDa localized to mitochondria can promote apoptosis, it induces the mitochondrial translocation of BAX and the release of proapoptotic factors. {ECO:0000269 PubMed:21364619, ECO:0000269 PubMed:26263979}.</p>
Molecular Weight:	51.9 kDa
UniProt:	Q14457
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 <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce

Application Details

even the most difficult-to-express proteins, including those that require post-translational modifications.

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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