

Datasheet for ABIN3096205

ULK2 Protein (AA 1-1036) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	ULK2
Protein Characteristics:	AA 1-1036
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ULK2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MEVVGDFEYS KRDVLVGHGAF AVVFRGRHRQ KTDWEVAIKS INKKNLSKSQ ILLGKEIKIL</p> <p>KELQHENIVA LYDVQELPNS VFLVMEYCNG GDLADYLQAK GTLSEDTIRV FLHQIAAAMR</p> <p>ILHSGIIHR DLKPQNILLS YANRRKSSVS GIRIKIADFG FARYLHSNMM AATLCGSPMY</p> <p>MAPEVIMSQH YDAKADLWSI GTVIYQCLVG KPPFQANSPQ DLRMFYEKNR SLMPSIPRET</p> <p>SPYLANLLLG LLQRNQKDRM DFEAFFSHPF LEQGPVKKSC PVPVPMYSGS VSGSSCGSSP</p> <p>SCRFASPPSL PDMQHIQEEEN LSSPPLGPPN YLQVSKDSAS TSSKNSSCDT DDFVLVPHNI</p> <p>SSDHSCDMPV GTAGRRASNE FLVCGGQCQP TVSPHSETAP IPVPTQIRNY QRIEQNLST</p> <p>ASSGTNVHGS PRSAVVRNRSN TSPMGFLRPG SCSPVPADTA QTVGRRLLSTG SSRPYSPSPL</p> <p>VGTIPEQFSQ CCCGHPQGHG SRSRNSSGSP VPQAQSPQSL LSGARLQSAP TLTDIYQNKQ</p> <p>KLRKQHSDPV CPSHTGAGYS YSPQSRPGS LGTSPTKHLG SSRRSSDWFF KTPLPTIIGS</p> <p>PTKTTAPFKI PKTQASSNLL ALVTRHGPAE EQSKDGNENR ECAHCLLVQG SERQRAEQQS</p>

KAVFGRSVST GKLSQQGKT PICRHQGSTD SLNTERPMDI APAGACGGVL APPAGTAASS
KAVLFTVGSP PHSAAPTCT HMFLRTRTTS VGPSNSGGSL CAMSGRVCVG SPPGPGFGSS
PPGAEAAPSL RYVPYGASPP SLEGLITFEA PELPEETLME REHTDTRLHL NVMLMFTECV
LDLTAMRGGN PELCTSAVSL YQIQESVVVD QISQLSKDWG RVEQLVLYMK AAQLLAASLH
LAKAIKSGK LSPSTAVKQV VKNLNERYKF CITMCKKLTE KLNRRFFSDKQ RFIDEINSVT
AEKLIYNCAV EMVQSAALDE MFQQTEDIVY RYHKAALLLE GLSRILQDPA DIENVHKYKC
SIERRLSALC HSTATV

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.

Product Details

- 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:	ULK2
Alternative Name:	ULK2 (ULK2 Products)
Background:	<p>Serine/threonine-protein kinase ULK2 (EC 2.7.11.1) (Unc-51-like kinase 2),FUNCTION:</p> <p>Serine/threonine-protein kinase involved in autophagy in response to starvation. Acts upstream of phosphatidylinositol 3-kinase PIK3C3 to regulate the formation of autophagophores, the precursors of autophagosomes. Part of regulatory feedback loops in autophagy: acts both as a downstream effector and a negative regulator of mammalian target of rapamycin complex 1 (mTORC1) via interaction with RPTOR. Activated via phosphorylation by AMPK, also acts as a negative regulator of AMPK through phosphorylation of the AMPK subunits PRKAA1, PRKAB2 and PRKAG1. May phosphorylate ATG13/KIAA0652, FRS2, FRS3 and RPTOR, however such data need additional evidences. Not involved in ammonia-induced autophagy or in autophagic response of cerebellar granule neurons (CGN) to low potassium concentration. Plays a role early in neuronal differentiation and is required for granule cell axon formation: may govern axon formation via Ras-like GTPase signaling and through regulation of the Rab5-mediated endocytic pathways within developing axons. {ECO:0000269 PubMed:18936157, ECO:0000269 PubMed:21460634, ECO:0000269 PubMed:21460635, ECO:0000269 PubMed:21690395, ECO:0000269 PubMed:21795849}.</p>
Molecular Weight:	112.7 kDa
UniProt:	Q8IYT8
Pathways:	Regulation of Cell Size, Autophagy

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
--------------------	---

Application Details

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 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