

Datasheet for ABIN7555930 **ULK2 Protein (AA 1-1036) (His tag)**



Overview

Quantity:	1 mg
Target:	ULK2
Protein Characteristics:	AA 1-1036
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ULK2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ULK2 Protein expressed in mammalian cells.
Sequence:	MEVVGDFEYS KRDLVGHGAF AVVFRGRHRQ KTDWEVAIKS INKKNLSKSQ ILLGKEIKIL
	KELQHENIVA LYDVQELPNS VFLVMEYCNG GDLADYLQAK GTLSEDTIRV FLHQIAAAMR
	ILHSKGIIHR DLKPQNILLS YANRRKSSVS GIRIKIADFG FARYLHSNMM AATLCGSPMY
	MAPEVIMSQH YDAKADLWSI GTVIYQCLVG KPPFQANSPQ DLRMFYEKNR SLMPSIPRET
	SPYLANLLLG LLQRNQKDRM DFEAFFSHPF LEQGPVKKSC PVPVPMYSGS VSGSSCGSSP
	SCRFASPPSL PDMQHIQEEN LSSPPLGPPN YLQVSKDSAS TSSKNSSCDT DDFVLVPHNI
	SSDHSCDMPV GTAGRRASNE FLVCGGQCQP TVSPHSETAP IPVPTQIRNY QRIEQNLTST
	ASSGTNVHGS PRSAVVRRSN TSPMGFLRPG SCSPVPADTA QTVGRRLSTG SSRPYSPSPL
	VGTIPEQFSQ CCCGHPQGHD SRSRNSSGSP VPQAQSPQSL LSGARLQSAP TLTDIYQNKQ
	KLRKQHSDPV CPSHTGAGYS YSPQPSRPGS LGTSPTKHLG SSPRSSDWFF KTPLPTIIGS
	PTKTTAPFKI PKTQASSNLL ALVTRHGPAE EQSKDGNEPR ECAHCLLVQG SERQRAEQQS
	KAVFGRSVST GKLSDQQGKT PICRHQGSTD SLNTERPMDI APAGACGGVL APPAGTAASS

KAVLFTVGSP PHSAAAPTCT HMFLRTRTTS VGPSNSGGSL CAMSGRVCVG SPPGPGFGSS PPGAEAAPSL RYVPYGASPP SLEGLITFEA PELPEETLME REHTDTLRHL NVMLMFTECV LDLTAMRGGN PELCTSAVSL YQIQESVVVD QISQLSKDWG RVEQLVLYMK AAQLLAASLH LAKAQIKSGK LSPSTAVKQV VKNLNERYKF CITMCKKLTE KLNRFFSDKQ RFIDEINSVT AEKLIYNCAV EMVQSAALDE MFQQTEDIVY RYHKAALLLE GLSRILQDPA DIENVHKYKC SIERRLSALC HSTATV 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:	ULK2
Alternative Name:	ULK2 (ULK2 Products)
Background:	Serine/threonine-protein kinase ULK2 (EC 2.7.11.1) (Unc-51-like kinase 2),FUNCTION:
	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:21460635,

 $ECO: 0000269 | PubMed: 21690395, ECO: 0000269 | PubMed: 21795849 \}.$

Molecular Weight: 112.7 kDa

UniProt: Q8IYT8

Pathways: Regulation of Cell Size, Autophagy

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.
Expiry Date:	12 months