

ULK2 Antibody (Center S323)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19251C

Specification

ULK2 Antibody (Center S323) - Product Information

Application	IF, WB,E
Primary Accession	Q8IYT8
Other Accession	Q9QY01 , NP_001136082.1
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	300-327

ULK2 Antibody (Center S323) - Additional Information

Gene ID 9706

Other Names

Serine/threonine-protein kinase ULK2, Unc-51-like kinase 2, ULK2, KIAA0623

Target/Specificity

This ULK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 300-327 amino acids from the Central region of human ULK2.

Dilution

IF~~1:10~50

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ULK2 Antibody (Center S323) is for research use only and not for use in diagnostic or therapeutic procedures.

ULK2 Antibody (Center S323) - Protein Information

Name ULK2

Synonyms KIAA0623

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.

Cellular Location

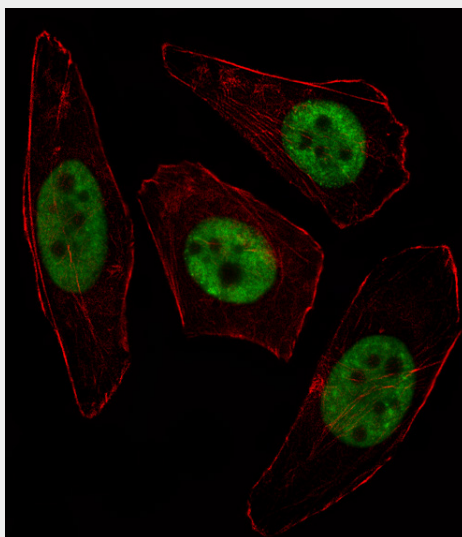
Cytoplasmic vesicle membrane; Peripheral membrane protein. Note=Localizes to pre-autophagosomal membrane

ULK2 Antibody (Center S323) - Protocols

Provided below are standard protocols that you may find useful for product applications.

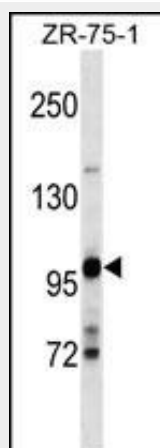
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ULK2 Antibody (Center S323) - Images



Fluorescent image of U251 cell stained with ULK2 Antibody (Center S323)(Cat#AP19251c).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with ULK2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin

(7units/ml, 1 h at 37°C).ULK2 immunoreactivity is localized to Nucleus significantly.



ULK2 Antibody (S323) (Cat. #AP19251c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the ULK2 antibody detected the ULK2 protein (arrow).

ULK2 Antibody (Center S323) - Background

This gene encodes a protein that is similar to a serine/threonine kinase in *C. elegans* which is involved in axonal elongation. The structure of this protein is similar to the *C. elegans* protein in that both proteins have an N-terminal kinase domain, a central proline/serine rich (PS) domain, and a C-terminal (C) domain. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq].

ULK2 Antibody (Center S323) - References

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Jung, C.H., et al. Mol. Biol. Cell 20(7):1992-2003(2009)
Stelzl, U., et al. Cell 122(6):957-968(2005)
Tomoda, T., et al. Genes Dev. 18(5):541-558(2004)
Yan, J., et al. Oncogene 18(43):5850-5859(1999)