

**ULK2 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16022****Specification**

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**ULK2 Antibody (Internal) - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">Q8IYT8</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	113kDa KDa

**ULK2 Antibody (Internal) - Additional Information****Gene ID** 9706**Other Names**

Serine/threonine-protein kinase ULK2, 2.7.11.1, Unc-51-like kinase 2, ULK2, KIAA0623

**Target/Specificity**

At least two isoforms of ULK2 are known to exist; this antibody will detect both isoforms. ULK2 antibody is predicted to not cross-react with ULK1.

**Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

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

**ULK2 Antibody (Internal) - 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.

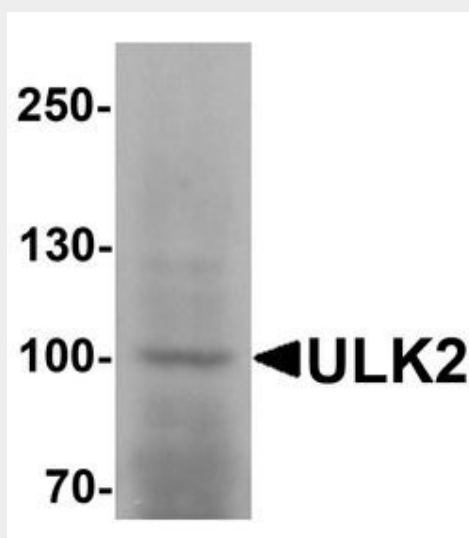
**Cellular Location**

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

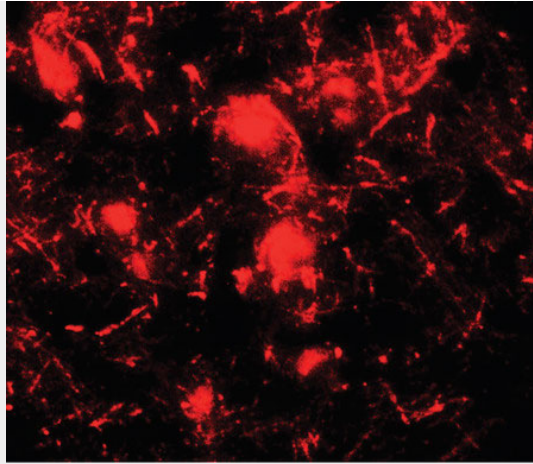
**ULK2 Antibody (Internal) - Protocols**

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

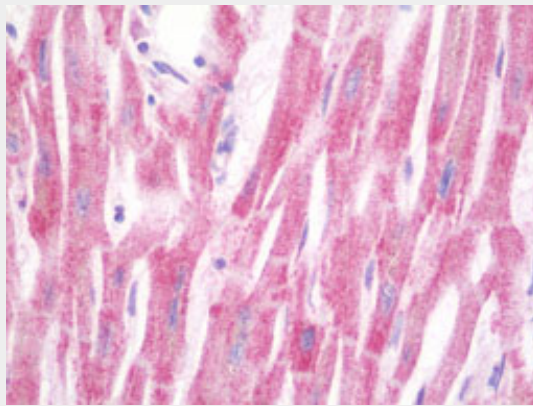
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**ULK2 Antibody (Internal) - Images**

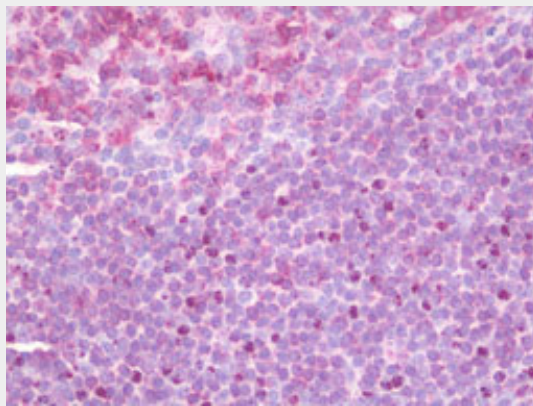
Western blot analysis of ULK2 in human brain tissue lysate with ULK2 antibody at 1 ug/ml.



Immunofluorescence of ULK2 in human brain tissue with ULK2 antibody at 20 ug/ml.



Anti-ULK2 antibody IHC staining of human heart.



Anti-ULK2 antibody IHC staining of human tonsil.

#### **ULK2 Antibody (Internal) - Background**

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#### **ULK2 Antibody (Internal) - References**

Ishikawa K.,et al.DNA Res. 5:169-176(1998).  
Zody M.C.,et al.Nature 440:1045-1049(2006).  
Chan E.Y.W.,et al.Mol. Cell. Biol. 29:157-171(2009).  
Lee E.J.,et al.Autophagy 7:689-695(2011).  
Loffler A.S.,et al.Autophagy 7:696-706(2011).