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ULK2 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS16022

Specification

ULK2 Antibody (Internal) - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q8IYT8
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**113kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IF~~1:50~200** **E~~N/A**

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.

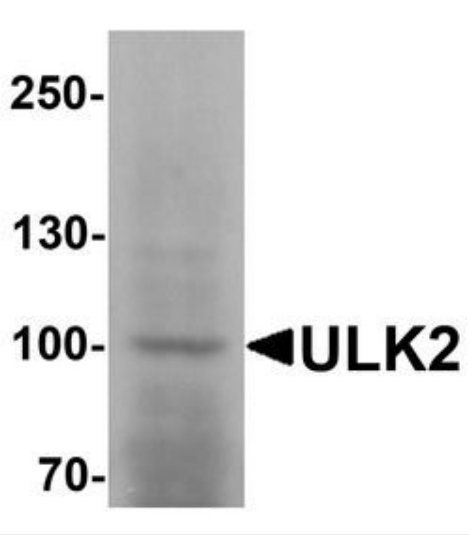
Cellular Location
Cytoplasmic vesicle membrane; Peripheral membrane protein. Note=Localizes to pre-autophagosomal membrane

ULK2 Antibody (Internal) - Protocols

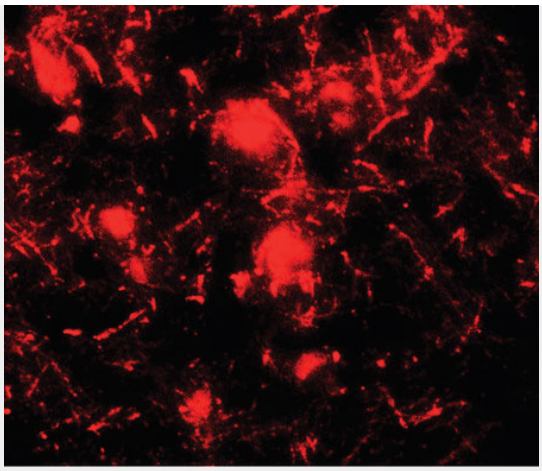
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

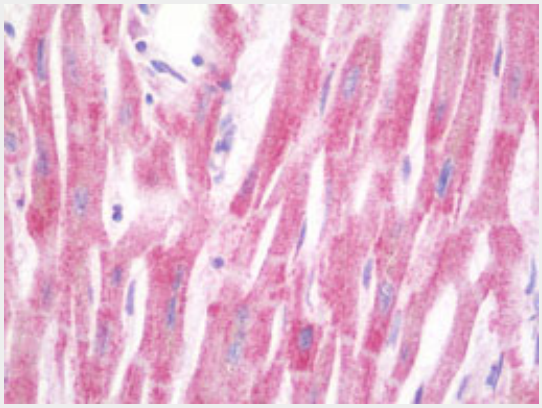
ULK2 Antibody (Internal) - Images



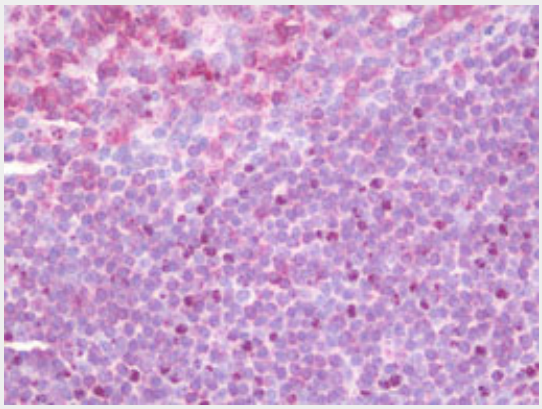
Western blot analysis of ULK2 in human brain tissue lysate with ULK2 antibody at 1 ug/ml.



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

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

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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).
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