

**ULK2 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2209a**

**Specification**

**ULK2 Antibody - Product Information**

Application	<b>E, WB, FC</b>
Primary Accession	<a href="#">Q8IYT8</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>112.7kDa KDa</b>

**Description**

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.

**Immunogen**

Purified recombinant fragment of human ULK2 (AA: 1-155) expressed in *E. Coli*.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**ULK2 Antibody - Additional Information**

**Gene ID** 9706

**Other Names**

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

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

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

**ULK2 Antibody - 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 - 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](#)