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# Phospho-ULK2(S323) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3806a

## Product Information

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| **Application** | DB, E |
| **Primary Accession** | Q8IYT8 |
| **Other Accession** | Q9QY01, NP_001136082.1 |
| **Reactivity** | Human |
| **Predicted** | Mouse, Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB40763 |
| **Calculated MW** | 112694 |

## Additional Information

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| **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 phosphopeptide corresponding to amino acid residues surrounding S323 of human ULK2. |
| **Dilution** | DB~~1:500 E~~Use at an assay dependent concentration. |
| **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** | Phospho-ULK2(S323) Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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 |

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| | 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 evidence. 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 |

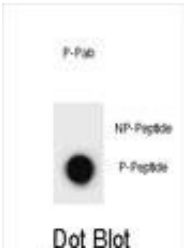
## Background

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].

## 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)

## Images




Dot blot analysis of ULK2 Antibody (Phospho S323) Phospho-specific Pab (Cat. #AP3806a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.