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Phospho-ULK2(S323) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3806a

Specification

Phospho-ULK2(S323) Antibody - Product Information

Application	**DB,E**
Primary Accession	Q8IYT8
Other Accession	Q9QY01, NP_001136082.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**112694**

Phospho-ULK2(S323) Antibody - 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 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.

Phospho-ULK2(S323) 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.

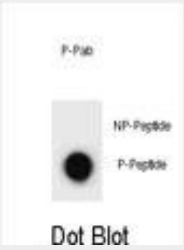
Cellular Location
Cytoplasmic vesicle membrane; Peripheral membrane protein. Note=Localizes to pre-autophagosomal membrane

Phospho-ULK2(S323) 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 Cytomety
- Cell Culture

Phospho-ULK2(S323) Antibody - 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.

Phospho-ULK2(S323) Antibody - 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].

Phospho-ULK2(S323) Antibody - 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)