

Phospho-ULK2(S323) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3806a**Specification**

Phospho-ULK2(S323) Antibody Blocking peptide - Product InformationPrimary Accession [Q8IYT8](#)**Phospho-ULK2(S323) Antibody Blocking peptide - Additional Information****Gene ID** 9706**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-ULK2(S323) Antibody Blocking peptide - 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 Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-ULK2(S323) Antibody Blocking peptide - Images

Phospho-ULK2(S323) Antibody Blocking peptide - Background

This gene encodes a protein that is similar to aserine/threonine kinase in C. elegans which is involved in axonalelongation. The structure of this protein is similar to the C.elegans protein in that both proteins have an N-terminal kinasedomain, a central proline/serine rich (PS) domain, and a C-terminal(C) domain. The gene is located within the Smith-Magenis syndromeregion on chromosome 17. Alternatively spliced transcript variantsencoding the same protein have been identified. [provided byRefSeq].

Phospho-ULK2(S323) Antibody Blocking peptide - 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)