

Rabbit anti-Human Phospho-ULK1 (S317) Polyclonal Antibody | anti-ULK1 antibody

Phospho-ULK1 (S317) Antibody

CATALOG # AAA289605	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Dot Blot
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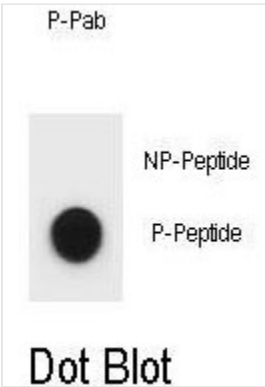
PRODUCT SYNONYMS

Phospho-ULK1 (S317); Polyclonal Antibody; Phospho-ULK1 (S317) Antibody; Serine/threonine-protein kinase ULK1; Autophagy-related protein 1 homolog; ATG1; hATG1; Unc-51-like kinase 1; ULK1; KIAA0722; anti-ULK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Clone Number	RB40755
Specificity	This ULK1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S317 of human ULK1.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/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.
Applicable Applications for anti-ULK1 antibody	ELISA, DB (Dot Blot)
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 negative regulator of mammalian target of rapamycin complex 1 (mTORC1) via interaction with RPTOR. Activated via phosphorylation by AMPK and also acts as a regulator of AMPK by mediating phosphorylation of AMPK subunits PRKAA1, PRKAB2 and PRKAG1, leading to negatively regulate AMPK activity. May phosphorylate ATG13/KIAA0652 and RPTOR; however such data need additional evidences. Plays a role early in neuronal differentiation and is required for granule cell axon formation. May also phosphorylate SESN2 and SQSTM1 to regulate autophagy.
Cellular Location	Cytoplasm, cytosol. Preautophagosomal structure. Note=Under starvation conditions, is localized to punctate structures primarily representing the isolation membrane that sequesters a portion of the cytoplasm resulting in the formation of an autophagosome.
Tissue Location	Ubiquitously expressed. Detected in the following adult tissues: skeletal muscle, heart, pancreas, brain, placenta, liver, kidney, and lung.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



DB (Dot Blot)
Dot blot analysis of ULK1 Antibody (Phospho S317) Phospho-specific Pab on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

ADDITIONAL INFORMATION

Related Product Information for anti-ULK1 antibody	Involved in autophagy. Required for autophagosome formation (By similarity). Target of the TOR kinase signaling pathway that regulates autophagy through the control of phosphorylation status of ATG13/KIAA0652 and ULK1, and the regulation of the ATG13-ULK1-RB1CC1 complex (By similarity). Phosphorylates ATG13/KIAA0652. Involved in axon growth (By similarity). Plays an essential role in neurite extension of cerebellar granule cells (By similarity).
Product Categories/Family for anti-ULK1 antibody	Cardiovascular; Metabolism; Neuroscience; Signal Transduction; Phospho Antibodies
References	Mercer, C.A., et al. Autophagy 5(5):649-662(2009) Ganley, I.G., et al. J. Biol. Chem. 284(18):12297-12305(2009) Jung, C.H., et al. Mol. Biol. Cell 20(7):1992-2003(2009) Hosokawa, N., et al. Mol. Biol. Cell 20(7):1981-1991(2009) Chan, E.Y. Sci Signal 2 (84), PE51 (2009) :

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507831
NCBI GeneID	8408
NCBI Accession #	NP_003556.1
NCBI GenBank Nucleotide #	NM_003565.2
UniProt Accession #	O75385; Q9UQ28
NCBI Official Full Name	serine/threonine-protein kinase ULK1
NCBI Official Synonym Full Names	unc-51 like autophagy activating kinase 1
NCBI Official Symbol	ULK1
NCBI Official Synonym Symbols	ATG1; ATG1A; UNC51; hATG1; Unc51.1
NCBI Protein Information	serine/threonine-protein kinase ULK1
UniProt Protein Name	Serine/threonine-protein kinase ULK1
UniProt Gene Name	ULK1
UniProt Synonym Gene Names	KIAA0722; ATG1; hATG1
UniProt Entry Name	ULK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/phospho-ulk1-s317-antibody-clone-rb40755-dot-blot-elisa/289605>