

**Product Name: Phospho-ULK1 (S556) (5G1) Rabbit
Monoclonal Antibody
Catalog #: AMRe06045**



Summary

Production Name	Phospho-ULK1 (S556) (5G1) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	ULK1
Alternative Names	ATG1; ATG1A; hATG1; ULK1; UNC51;
Gene ID	8408.0
SwissProt ID	O75385.

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	113kDa

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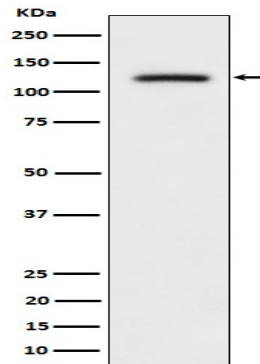
Background

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. Serine/threonine-protein kinase involved in autophagy in response to starvation (PubMed: [18936157](http://www.uniprot.org/citations/18936157)), PubMed: [21460634](http://www.uniprot.org/citations/21460634)), PubMed: [21795849](http://www.uniprot.org/citations/21795849)), PubMed: [23524951](http://www.uniprot.org/citations/23524951)), PubMed: [25040165](http://www.uniprot.org/citations/25040165)), PubMed: [31123703](http://www.uniprot.org/citations/31123703)). Acts upstream of phosphatidylinositol 3-kinase PIK3C3 to regulate the formation of autophagophores, the precursors of autophagosomes (PubMed: [18936157](http://www.uniprot.org/citations/18936157)), PubMed: [21460634](http://www.uniprot.org/citations/21460634)), PubMed: [21795849](http://www.uniprot.org/citations/21795849)), PubMed: [25040165](http://www.uniprot.org/citations/25040165)). 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 (PubMed: [21795849](http://www.uniprot.org/citations/21795849)). 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 (PubMed: [21460634](http://www.uniprot.org/citations/21460634)). May phosphorylate ATG13/KIAA0652 and RPTOR; however such data need additional evidences (PubMed: [18936157](http://www.uniprot.org/citations/18936157)). Plays a role early in neuronal differentiation and is required for granule cell axon formation (PubMed: [11146101](http://www.uniprot.org/citations/11146101)). May also phosphorylate SESN2 and SQSTM1 to regulate autophagy (PubMed: [25040165](http://www.uniprot.org/citations/25040165)). Phosphorylates FLCN, promoting autophagy (PubMed: [25126726](http://www.uniprot.org/citations/25126726)). Phosphorylates AMBRA1 in response to autophagy induction, releasing AMBRA1 from the cytoskeletal docking site to induce autophagosome nucleation (PubMed: [20921139](http://www.uniprot.org/citations/20921139)).

Research Area

Image Data

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Western blot analysis of Phospho-ULK1 (S556) expression in 293T transfected with ULK1 cell lysate.

Note

For research use only.