# ULK1 Rabbit mAb [LdgG]

Cat NO. :A53639

## Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC ICC/IF	Human,Mouse,R	O75385	120kDa	Rabbit	lgG	50ul,100ul,200ul
	at					

## **Applications detail:**

Application	Dilution			
₩В	1:1000-2000			
нс	1:100			
ICC/IF	1:100			
The optimal dilutions should be determined by the end user				

# Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

**Purification**:

Affinity-chromatography

#### Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human ULK1

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

#### **Tissue specificity:**

Ubiquitously expressed. Detected in the following adult tissues: skeletal muscle, heart, pancreas, brain, placenta,

liver, kidney, and lung.

Subcellular location:

Cytoplasm, cytosol. Preautophagosomal structure.

**Function**:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/ Immunofluorescence F: Flow Cytometry

Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

For Research Use Only. Not For Use In Diagnostic Procedures.

Serine/threonine-protein kinase involved in autophagy in response to starvation (PubMed:18936157, PubMed:21460634, PubMed:21795849, PubMed:23524951, PubMed:25040165, PubMed:31123703). Acts upstream of phosphatidylinositol 3-kinase PIK3C3 to regulate the formation of autophagophores, the precursors of autophagosomes (PubMed:18936157, PubMed:21460634, PubMed:21795849, PubMed: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). 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). May phosphorylate ATG13/KIAA0652 and RPTOR,however such data need additional evidences (PubMed:18936157). Plays a role early in neuronal differentiation and is required for granule cell axon formation (PubMed:11146101). May also phosphorylate SESN2 and SQSTM1 to regulate autophagy (PubMed:25040165). Phosphorylates FLCN, promoting autophagy (PubMed:25126726). Phosphorylates AMBRA1 in response to autophagy induction, releasing AMBRA1 from the cytoskeletal docking site to induce autophagosome nucleation (PubMed:20921139). Phosphorylates ATG4B, leading to inhibit autophagy by decreasing both proteolytic activation and delipidation activities of ATG4B (PubMed:28821708)..

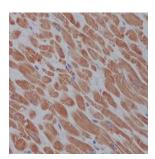
# Validation Data:

### ULK1 Rabbit mAb [LdgG] Images

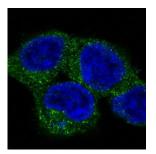


Western blot (SDS PAGE) analysis of extracts from (1) HEK293 cell lysate; (2) PC12 cell lysate.Using ULK1 Rabbit mAb [LdgG]at dilution of 1:1000 incubated at  $4^{\circ}$  over night.

View more information on http://naturebios.com



Immunohistochemical analysis of paraffin-embedded human heart, .Using ULK1 Rabbit mAb [LdgG] at dilution of 1:100 incubated at  $4^{\circ}$ C over night.Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunofluorescent analysis of 293 cells, Using ULK1 Rabbit mAb [LdgG] at dilution of 1:100 incubated at 4  $^{\circ}\!C$  over night.