

# ULK1 polyclonal antibody

Catalog: BS80531

Host: F

Rabbit

Reactivity: Human, Mouse, Rat

### **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. 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. Phosphorylates FLCN, promoting autophagy. Phosphorylates AMBRA1 in response to autophagy induction, releasing AMBRA1 from the cytoskeletal docking site to induce autophagosome nucleation.

#### **Product:**

1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

**Molecular Weight:** 

#### 150kDa/140kDa

**Swiss-Prot:** 

075385

## **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

# Applications:

WB,1:500 - 1:1000|IF/ICC,1:10 - 1:100

### **Storage&Stability:**

Store at  $4 \,^{\circ}{\rm C}$  short term. Aliquot and store at  $-20 \,^{\circ}{\rm C}$  long term. Avoid freeze-thaw cycles.

**Modification:** 

Unmodification

### **DATA:**

Western blot analysis of extracts of Rat brain, using ULK1 antibody at 1:500 dilution.<br/>br/>Secondary antibody: HRP Goat Anti-Rabbit IgG at 1:10000 dilution.<br/>br/>Lysates/proteins: 25ug per lane.<br/>br/>Blocking buffer: 3% nonfat dry milk in TBST.<br/>br/>Detection: ECL Enhanced Kit .<br/>br/>Exposure time: 180s.

Western blot analysis of extracts of various lysates, using ULK1 antibody at 1:2338 dilution.<br/>Secondary antibody: HRP Goat Anti-Rabbit IgG at 1:10000 dilution.<br/>br/>Lysates/proteins: 25ug per lane.<br/>br/>Blocking buffer: 3% nonfat dry milk in TBST.<br/>br/>Detection: ECL Basic Kit.<br/>br/>Exposure time: 10s.

Immunofluorescence analysis of HeLa cells using ULK1 Rabbit pAb at dilution of 1:200. Blue: DAPI for nuclear staining.

Immunofluorescence analysis of NIH/3T3 cells using ULK1 Rabbit pAb at dilution of 1:200. Blue: DAPI for nuclear staining.

#### Note:

For research use only, not for use in diagnostic procedure.

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