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Datasheet for ABIN701440

anti-ULK1 antibody (AA 951-1050)

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Overview

Quantity:	100 µL
Target:	ULK1
Binding Specificity:	AA 951-1050
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ULK1 antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human ATG1/ULK1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Cow,Pig,Horse,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	ULK1
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Target Details

Alternative Name: [ATG1/ULK1 \(ULK1 Products\)](#)

Background: Synonyms: ATG1, ATG1A, UNC51, hATG1, Unc51.1, Serine/threonine-protein kinase ULK1, Autophagy-related protein 1 homolog, Unc-51-like kinase 1, ULK1, KIAA722

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/KIAA652 and RPTOR, however such data need additional evidences. Plays a role early in neuronal differentiation and is required for granule cell axon formation.

Gene ID: 8408

UniProt: [O75385](#)

Pathways: [Regulation of Cell Size, Autophagy](#)

Application Details

Application Notes: WB 1:300-5000
ELISA 1:500-1000
FCM 1:20-100
IHC-P 1:200-400
IHC-F 1:100-500
IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

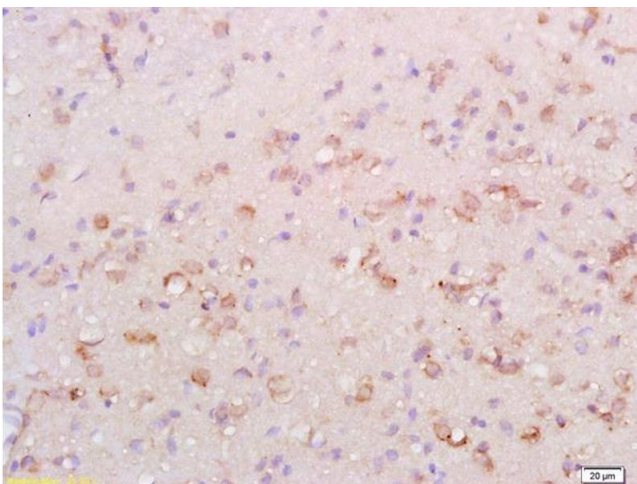
Handling

Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

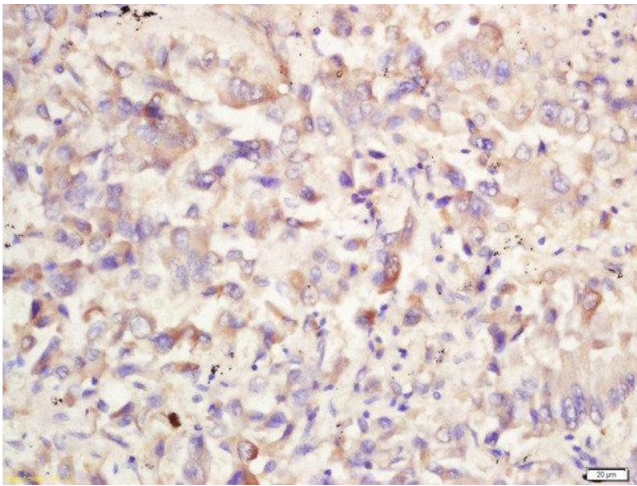
- Product cited in:
- Shen, Hou, Zhu, Zhao, Ouyang, Feng et al.: "Cortical spreading depression preconditioning mediates neuroprotection against ischemic stroke by inducing AMP-activated protein kinase-dependent autophagy in a rat cerebral ischemic/reperfusion ..." in: **Journal of neurochemistry**, Vol. 140, Issue 5, pp. 799-813, (2016) ([PubMed](#)).
- Gao, Wang, Yi, Kou, Xie, Song: "Activation of lysosomal degradative pathway in spinal cord tissues of carbon disulfide-treated rats." in: **Chemico-biological interactions**, Vol. 219C, pp. 76-82, (2014) ([PubMed](#)).
- Song, Kou, Zou, Gao, Zeng, Xie: "Involvement of autophagy in tri-ortho-cresyl phosphate-induced delayed neuropathy in hens." in: **Neurochemistry international**, Vol. 64, pp. 1-8, (2013) ([PubMed](#)).

Images



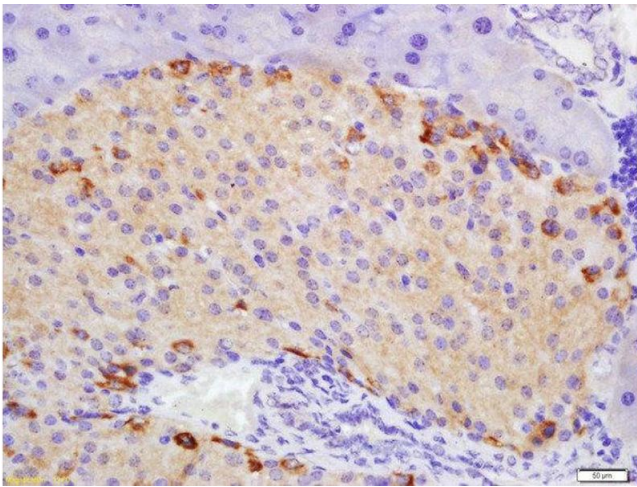
Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat brain labeled with Anti-ATG1/ULK1 Polyclonal Antibody, Unconjugated (ABIN701440) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Rabbit Anti-ATG1/ULK1 Polyclonal Antibody, Unconjugated 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin embedded mouse pancreas labeled with Rabbit Anti-ATG1/ULK1 Polyclonal Antibody, Unconjugated 1:200 followed by conjugation to the secondary antibody and DAB staining