

**DATASHEET**
**ULK1 Rabbit Polyclonal Antibody**
**CAT. NO. APA14796**
**KEY FEATURES**

Target	ULK1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

**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 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to ULK1
Specificity	Recognizes endogenous levels of ULK1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide of human ULK1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 112 kD; Observed: 150 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	KIAA0722; Serine/threonine-protein kinase ULK1; Autophagy-related protein 1 homolog; ATG1; hATG1; Unc-51-like kinase 1
Gene Symbol	ULK1
Entrez Gene	8408(Human); 22241(Mouse)
SwissProt	O75385(Human); O70405(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

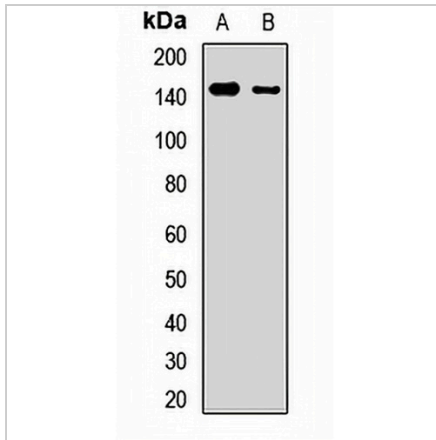
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

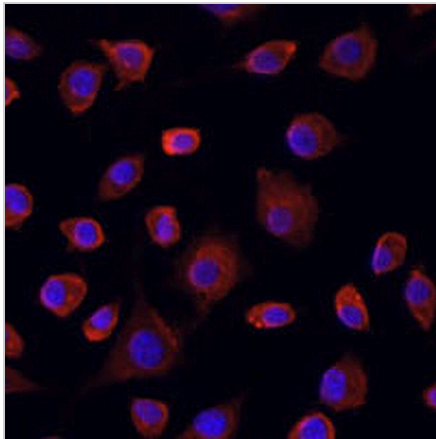
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**DATA**



Western blot analysis of ULK1 expression in HepG2 (A), HeLa (B) whole cell lysates. (Predicted band size: 112 kD; Observed band size: 150 kD)



Immunofluorescent analysis of ULK1 staining in L929 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.