

ULK1 Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP09413
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	Synthesized peptide derived from the C-terminal region of human ULK1.
Mol wt	112601
Species reactivity	Human, Mouse
Clonality	Polyclonal
Recommended application	IHC-p, ELISA
Concentration	1 mg/ml
Full name	ULK1 Antibody
Synonyms	ULK1; KIAA0722; Serine/threonine-protein kinase ULK1; Autophagy-related protein 1 homolog; ATG1; hATG1; Unc-51-like kinase 1

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

Two related serine/threonine kinases, UNC-51-like kinase 1 and 2 (ULK1, ULK2), were discovered as mammalian homologs of the *C.elegans* gene UNC-51 in which mutants exhibited abnormal axonal extension and growth. Both proteins are widely expressed and contain an amino-terminal kinase domain followed by a central proline/serine rich domain and a highly conserved carboxy-terminal domain. The roles of ULK1 and ULK2 in axon growth have been linked to studies showing that the kinases are localized to neuronal growth cones and are involved in endocytosis of critical growth factors, such as NGF. Yeast two-hybrid studies found ULK1/2 associated with modulators of the endocytic pathway, SynGAP and syntenin. Structural similarity of ULK1/2 has also been recognized with the yeast autophagy protein Atg1/Apg1. Knockdown experiments using siRNA demonstrated that ULK1 is essential for autophagy, a catabolic process for the degradation of bulk cytoplasmic contents. It appears that Atg1/ULK1 can act as a convergence point for multiple signals that control autophagy, and can bind to several autophagy-related (Atg) proteins, regulating phosphorylation states and protein trafficking.

Recommended Dilution

IHC: 1: 100 - 1: 300

ELISA: 1: 40000

Not yet tested in other applications.

Images

No images.

Storage

-20°C for one year