

Datasheet for 600-401-C50**ATG13 Antibody****Overview**

Description:	Anti-ATG13 (RABBIT) Antibody - 600-401-C50
Item No.:	600-401-C50
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	ATG13 is a target of the TOR kinase signaling pathway that regulates autophagy through the control of the phosphorylation status of ATG13 and ULK1 through their stable complex, and the regulation of ATG13-ULK1-RB1CC1. ATG13 also forms a stable complex with FIP200. ULK1 phosphorylates ATG13 on S318 and promotes its release to damaged mitochondria. Autophagy is a normal process in eukaryotes required for turnover of cellular components during starvation and stress. It plays an essential role in cellular differentiation, cell death and aging. Defects in this evolutionarily conserved process may contribute to certain human diseases such as cancer, neurodegenerative diseases, muscular disorders and pathogen infections. ATG13 is one of several ATG genes required for autophagosome formation in mammalian cells. mTOR interacts with this complex in a nutrient dependent manner and phosphorylates Atg13 and ULK1.
Synonyms:	rabbit anti-ATG13 Antibody, ATG-13, ATG 13, Autophagy-related protein 13, KIAA0652
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ATG13
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared by repeated immunizations with a synthetic peptide corresponding to the S318 region of ATG13.
Purity/Specificity:	This affinity-purified antibody is directed against human ATG13 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with ATG13 from human based on 100% sequence homology with the immunogen. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - O75143 • NCBI - NP_001136145.1 • GenelD - 9776

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 56.6 kDa in size corresponding to human ATG13 protein by western blotting in the appropriate stimulated tissue or cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:220,000-1:250,000
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.13 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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- Cong Y et al. Influenza A virus subverts the LC3-pericentrin dynein adaptor complex for host cytoplasm entry. *Sci Adv.* (2025)
- Colecchia D et al. MAPK15 is part of the ULK complex and controls its activity to regulate early phases of the autophagic process. *J Biol Chem.* (2018)

Disclaimer

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