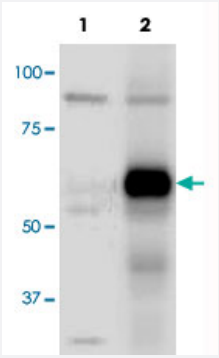
ATG13 (phospho S318) polyclonal antibody

Catalog # PAB19948 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of 293T with ATG13 (phospho S318) polyclonal antibody (Cat # PAB19948) at 1 ug/mL dilution. Lane 1: kinase-dead hypophosphorylated Ulk1-K46A mutant + ATG13; Lane 2: 93T Ulk1 + ATG13 lysate.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of ATG13.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding S318 of human ATG13.
Host	Rabbit
Theoretical MW (kDa)	56.6
Reactivity	Human
Specificity	The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity occurs against human ATG13 pS318 protein and the antibody is specific for the phosphorylated form of the protein. Reactivity with non-phosphorylated human ATG13 is minimal by ELISA and western blot. 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.
Form	Liquid
Purification	Affinity purification

Recommend Usage	ELISA (1:25000-1:175000) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH_2PO_4, 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — ATG13

Entrez GeneID	9776
Gene Name	ATG13
Gene Alias	KIAA0652
Gene Description	ATG13 autophagy related 13 homolog (S. cerevisiae)
Gene Ontology	Hyperlink
Other Designations	autophagy-related protein 13

Publication Reference

- BL-918, a small-molecule activator of ULK1, induces cytoprotective autophagy for amyotrophic lateral sclerosis therapy.

  Wei Liu, Shi-ou Zhu, Yu-lin Guo, Long-fang Tu, Yong-qi Zhen, Rong-yan Zhao, Liang Ou-Yang, Hiroshi Kurihara,Rong-Rong He and Bo Liu.

  Acta Pharmacologica Sinica 2023 Mar; 44(3):524.

  Application: WB, Mouse, NSC34 cells

- SREBP-1c impairs ULK1 sulfhydration-mediated autophagic flux to promote hepatic steatosis in high-fat-diet-fed mice.

  Thuy T P Nguyen, Do-Young Kim, Yu-Geon Lee, Young-Seung Lee, Xuan T Truong, Jae-Ho Lee, Dae-Kyu Song, Taeg Kyu Kwon, So-Hyun Park, Chang Hwa Jung, Changjong Moon, Timothy F Osborne, Seung-Soon Im, Tae-Il Jeon.

  Molecular Cell 2021 Sep; 81(18):3820.

  Application: WB-Tr, Human, HEK 293T cells

- Multi-omics approaches identify SF3B3 and SIRT3 as candidate autophagic regulators and druggable targets in invasive breast carcinoma.

  Shouyue Zhang, Jin Zhang, Yang An, Xiaoxi Zeng, Ziyi Qin, Yuqian Zhao, Heng Xu, Bo Liu.

  Acta Pharmaceutica Sinica. B 2021 May; 11(5):1227.

  Application: WB-Tr, Human, Mouse, MCF-7 cells, Mouse tumors

- The autophagy-initiating protein kinase ULK1 phosphorylates human cytomegalovirus tegument protein pp28 and regulates efficient virus release.

  Patrick König, Adriana Svrlanska, Clarissa Read, Sabine Feichtinger, Thomas Stamminger.

  Journal of Virology 2021 Feb; 95(6):e02346.

  Application: WB-Tr, Human, HEK 293T cells

- Mir214-3p and Hnf4a/Hnf4α reciprocally regulate Ulk1 expression and autophagy in nonalcoholic hepatic steatosis.

  Da-Hye Lee, So-Hyun Park, Jiyun Ahn, Seung Pyo Hong, Eunyoung Lee, Young-Jin Jang, Tae-Youl Ha, Yang Hoon Huh, Seung-Yeon Ha, Tae-Il Jeon, Chang Hwa Jung.

  Autophagy 2020 Oct; 1.

  Application: WB-Ti, Mouse, Mouse liver

- A small-molecule activator of UNC-51-like kinase 1 (ULK1) that induces cytoprotective autophagy for Parkinson's disease treatment.

  Ouyang L, Zhang L, Zhang S, Yao D, Zhao Y, Wang G, Fu L, Lei P, Liu B.

  Journal of Medicinal Chemistry 2018 Apr; 61(7):2776.

  Application: WB, Human, HEK 293, SH-SY5Y cells

- Discovery of a small-molecule bromodomain-containing protein 4 (BRD4) inhibitor that induces AMP-activated protein kinase-modulated autophagy-associated cell death in breast cancer.

  Ouyang L, Zhang L, Liu J, Fu L, Yao D, Zhao Y, Zhang S, Wang G, He G, Liu B.

  Journal of Medicinal Chemistry 2017 Dec; 60(24):9990.

  Application: WB-Ce, Human, MCF-7, MDA-MB-231 cells

- Assessment of Posttranslational Modifications of ATG proteins.

  Xie Y, Kang R, Tang D.

  Methods in Enzymology 2016 Nov; 587:188.

  Application: ELISA, WB, No description, Mammalian cells (No description)

- Pharmacological Inhibition of ULK1 Blocks mTOR-Dependent Autophagy.

  Petherick KJ, Conway OJ, Mpamhanga C, Osborne SA, Kamal A, Saxty B, Ganley IG.

  The Journal of Biological Chemistry 2015 May; 290(18):11376.

  Application: WB, Mouse, MEFs