Datasheet for ABIN392555

anti-PIK3C3 antibody (N-Term)

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Overview

Quantity:	400 µL
Target:	PIK3C3
Binding Specificity:	AA 24-53, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIK3C3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This PI3KC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 24-53 amino acids from the N-terminal region of human PI3KC3.
Clone:	RB1695
Isotype:	Ig Fraction
Predicted Reactivity:	M, Pig, Rat, X
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	PIK3C3

Target Details

Alternative Name:	PI3KC3 (PIK3C3 Products)
Background:	PI3KC3 is a catalytic subunit of the PI3K complex involved in the transport of lysosomal enzyme precursors to lysosomes. This enzyme acts catalytically to convert 1-phosphatidyl-1D-myo-inositol to 1-phosphatidyl-1D-myo-inositol 3-phosphate. Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). The regulation of the Beclin 1-PI3KC3 complex lipid kinase activity is a critical element in the autophagy signaling pathway.
Molecular Weight:	101549
Gene ID:	5289
NCBI Accession:	NP_002638
UniProt:	Q8NEB9
Pathways:	AMPK Signaling, Activation of Innate immune Response, Inositol Metabolic Process, Toll-Like Receptors Cascades, Autophagy

Application Details

Application Notes:	IF: 1:10~50. WB: 1:1000. IHC-P: 1:50~100
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small

Handling

	aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Publications

Product cited in:

Wang, Li, Du, Xu, Wang, Zhang, Xu, Zeng, Mao, Cao: "The Class I PI3K inhibitor S14161 induces autophagy in malignant blood cells by modulating the Beclin 1/Vps34 complex." in: **Journal of pharmacological sciences**, Vol. 134, Issue 4, pp. 197-202, (2018) (PubMed).

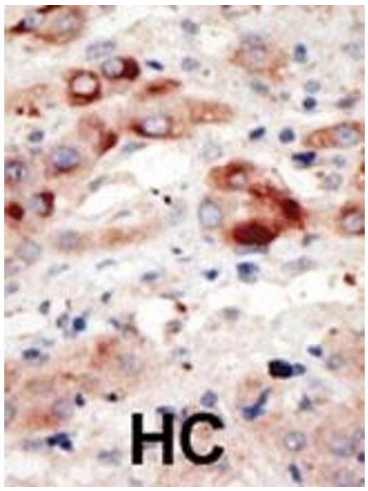
Won, Yen, Lin, Jiang-Shieh, Lin, Chen, Su: "Autophagy mediates cytotoxicity of human colorectal cancer cells treated with garcinielliptone FC." in: **Journal of cellular physiology**, Vol. 233, Issue 1, pp. 497-505, (2017) (PubMed).

Lin, Wang, Hsu, Cho, Yang, Chien: "Capsaicin Induces Autophagy and Apoptosis in Human Nasopharyngeal Carcinoma Cells by Downregulating the PI3K/AKT/mTOR Pathway." in: **International journal of molecular sciences**, Vol. 18, Issue 7, (2017) (PubMed).

Zhang, Morgan, Chen, Choksi, Liu: "Induction of autophagy is essential for monocyte-macrophage differentiation." in: **Blood**, Vol. 119, Issue 12, pp. 2895-905, (2012) (PubMed).

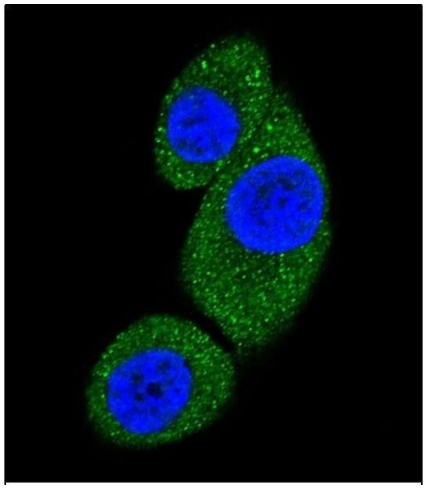
McLeod, Zhou, Li, Wang, He: "The class III kinase Vps34 promotes T lymphocyte survival through regulating IL-7R? surface expression." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 187, Issue 10, pp. 5051-61, (2011) (PubMed).

There are more publications referencing this product on: Product page



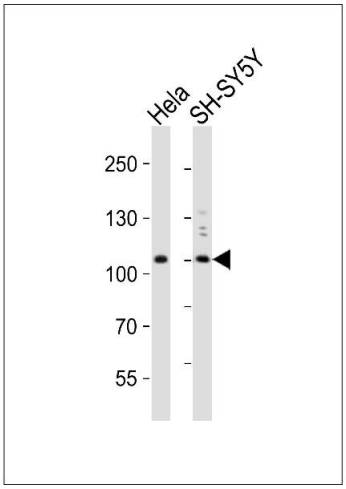
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.



Immunofluorescence

Image 2. Confocal immunofluorescent analysis of PI3KC3 Antibody (N-term) (ABIN392555 and ABIN2842102) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DI was used to stain the cell nuclear (blue).



Western Blotting

Image 3. Western blot analysis of lysates from Hela, SH-SY5Y cell line (from left to right), using PI3KC3 Antibody (N-term) A. A was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.