Datasheet for ABIN388979

anti-SQSTM1 antibody (AA 317-346)

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Overview

Quantity:	400 µL
Target:	SQSTM1
Binding Specificity:	AA 317-346
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SQSTM1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This SQSTM1 (p62) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 317-346 amino acids of human SQSTM1 (p62).
Clone:	RB4614
Isotype:	IgG
Predicted Reactivity:	Rat
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	SQSTM1

Target Details

Alternative Name:	SQSTM1 (p62) (SQSTM1 Products)
Background:	SQSTM1/p62 is an adapter protein which binds ubiquitin and may regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. This protein may play a role in titin/TTN downstream signaling in muscle cells, and may also regulate signaling cascades through ubiquitination. This protein is involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels. SQSTM1/p62 also appears to play a role in macroautophagic removal of intracellular protein aggregates. Cellular depletion studies of SQSTM1/p62 have indicated a role for association with LC3 and aggregate proteins in order to facilitate normal formation of the autophagosome.
Molecular Weight:	47687
Gene ID:	8878
NCBI Accession:	NP_001135770, NP_001135771, NP_003891
UniProt:	Q13501
Pathways:	NF-kappaB Signaling, Neurotrophin Signaling Pathway, Autophagy

Application Details

Application Notes:	IF: 1:200. IF: 1:50~100. WB: 1:2000. WB: 1:2000. IHC-P: 1:25. IHC-P: 1:50~100
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal 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.
Handling Advice:	Avoid freeze-thaw cycles.
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 aliquots.
Expiry Date:	6 months

Publications

Product cited in:

Tan, Wang, Yu, Zhang, Bristow, Hill, Tannock: "Role of Autophagy as a Survival Mechanism for Hypoxic Cells in Tumors." in: **Neoplasia (New York, N.Y.)**, Vol. 18, Issue 6, pp. 347-55, (2017) (PubMed).

Ichikawa, Alves, Pfeiffer, Langa, Hernández-Santana, Suzuki, Prehn, Engel, Henshall: "Deletion of the BH3-only protein Noxa alters electrographic seizures but does not protect against hippocampal damage after status epilepticus in mice." in: **Cell death & disease**, Vol. 8, Issue 1, pp. e2556, (2017) (PubMed).

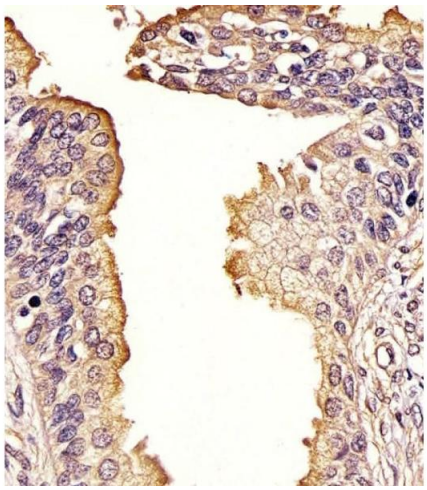
Tan, Joshua, Wang, Bristow, Wouters, Allen, Tannock: "Up-regulation of autophagy is a mechanism of resistance to chemotherapy and can be inhibited by pantoprazole to increase drug sensitivity." in: **Cancer chemotherapy and pharmacology**, Vol. 79, Issue 5, pp. 959-969, (2017) (PubMed).

Tan, Joshua, Saggar, Yu, Wang, Kanga, Zhang, Chen, Wouters, Tannock: "Effect of pantoprazole to enhance activity of docetaxel against human tumour xenografts by inhibiting autophagy." in: **British journal of cancer**, Vol. 112, Issue 5, pp. 832-40, (2015) (PubMed).

Wu, Zhang, Lu, Xia, Zhou, Petrof, Claud, Chen, Chang, Carmeliet, Sun: "Intestinal epithelial vitamin D receptor deletion leads to defective autophagy in colitis." in: **Gut**, Vol. 64, Issue 7, pp. 1082-94, (2015) (PubMed).

There are more publications referencing this product on: Product page

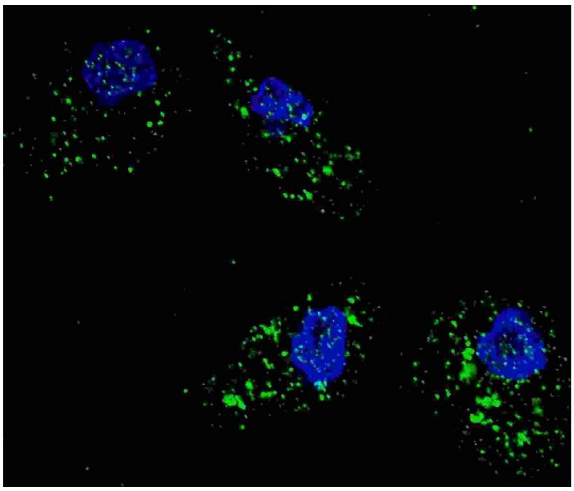
Images



Immunohistochemistry (Paraffin-embedded Sections)

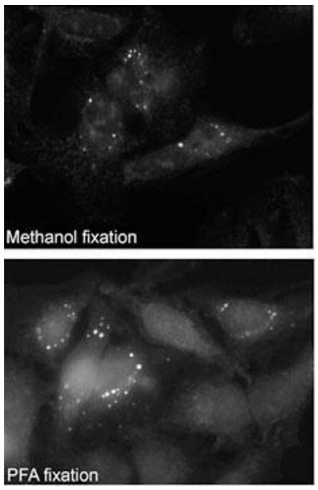
Image 1. (ABIN388979 and ABIN2850435) staining SQSTM1 in Human prostate tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3 % BSA for 0. 5 hour at room temperature, antigen retrieval was by heat mediation with a citrate buffer (pH 6). Samples were incubated with primary antibody (1/25) for 1 hours at 37 °C. A undiluted

biotinylated goat polyvalent antibody was used as the secondary antibody.



Immunofluorescence

Image 2. Fluorescent image of cells stained with SQSTM1 (p62) (C-term) antibody. cells were treated with Chloroquine (50 µM,16h), then fixed with 4 % PFA (20 min), permeabilized with Triton X-100 (0.2 %, 30 min). Cells were then incubated with (ABIN388979 and ABIN2850435) SQSTM1 (p62) (C-term) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/mL, 5 min). SQSTM1 (p62) immunoreactivity is localized to autophagic vacuoles in the cytoplasm of cells, supported by Human Protein Atlas Data (http://www.proteinatlas.org/ENSG00000161011).



Immunofluorescence

Image 3. Immunofluorescence staining of Autophagy SQSTM1 (p62) Antibody (C-term) (ABIN388979 and ABIN2850435) on Methanol-fixed and PFA fixed HeLa cells. Data courtesy of Dr. Eeva-Liisa Eskelinen, University of Helsinki,Finland.

Please check the product details page for more images. Overall 6 images are available for ABIN388979.