Datasheet for ABIN3044026

anti-SQSTM1 antibody (N-Term)

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Overview

Quantity:	100 µg
Target:	SQSTM1
Binding Specificity:	AA 91-110, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SQSTM1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-SQSTM1/p62 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human SQSTM1, different from the related rat and mouse sequences by one amino acid.
Sequence:	KDDIFRIYIK EKKECRRDHR
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-SQSTM1/p62 Antibody (ABIN3044026). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are

Product Details

	designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	SQSTM1
Alternative Name:	SQSTM1 (SQSTM1 Products)
Background:	Synonyms: Sequestosome-1,EBI3-associated protein of 60 kDa,EBIAP,p60,Phosphotyrosine-independent ligand for the Lck SH2 domain of 62 kDa,Ubiquitin-binding protein p62,SQSTM1,ORCA, OSIL, Tissue Specificity: Ubiquitously expressed. . Background: SQSTM1 (Sequestosome-1), also known as Ubiquitin-Binding Protein P62 or P62, is a protein that in humans is encoded by the SQSTM1 gene. The Src homology type 2 (SH2) domain is a highly conserved motif of about 100 amino acids which mediates protein-protein interactions by binding to phosphotyrosine.p56-lck, a T-cell-specific src family tyrosine kinase with an SH2 domain, is involved in T-cell signal transduction. The International Radiation Hybrid Mapping Consortium mapped the p62 gene to chromosome 5q35. Park et al. (1995) found that the p56-lck SH2 domain binds to p62 at the ser59 of p62 only when that serine is phosphorylated. Joung et al. (1996) expressed epitope-tagged p62 in Hela cells and showed that the expressed protein bound to the lck SH2 domain and that this binding was dependent on the N-terminal 50 amino acids of p62 but not on the tyrosine residue in this region. Sequence Similarities: Contains 1 PB1 domain.
Molecular Weight:	60 kDa
UniProt:	Q13501
Pathways:	NF-kappaB Signaling, Neurotrophin Signaling Pathway, Autophagy

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL, Human Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human 1. Hocking, L. J., Lucas, G. J. A., Daroszewska, A., Mangion, J., Olavesen, M., Cundy, T., Nicholson, G. C., Ward, L., Bennett, S. T., Wuyts, W., Van Hul, W., Ralston, S. H. Domain-specific mutations in sequestosome 1 (SQSTM1) cause familial and sporadic Paget's disease. Hum.

Application Details

	Molec. Genet. 11: 2735-2739, 2002. 2. Joung, I., Strominger, J. L., Shin, J. Molecular cloning of a phosphotyrosine-independent ligand of the p56-lck SH2 domain. Proc. Nat. Acad. Sci. 93: 5991-5995, 1996. 3. Park, I., Chung, J., Walsh, C. T., Yun, Y., Strominger, J. L., Shin, J. Phosphotyrosine-independent binding of a 62- kDa protein to the src homology 2 (SH2) domain of p56-lck and its regulation by phosphorylation of ser-59 in the lck unique N-terminal region. Proc. Nat. Acad. Sci. 92: 12338-12342, 1995.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P) and ICC.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Thimerosal (Merthiolate) and Sodium azide: POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:	Yu, Li, Wang, He, Ding, Zhang, Yu, Shi, Cui, Wang, Wang, Sun, Zhang, Du, Zhu: "Interferon regulatory factor-1 activates autophagy to aggravate hepatic ischemia-reperfusion injury via the P38/P62 pathway in mice." in: **Scientific reports**, Vol. 7, pp. 43684, (2018) (PubMed).

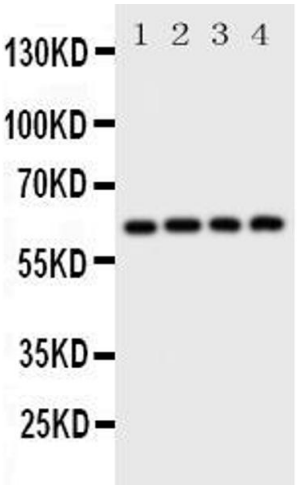
Publications

Jeong, He, Nohara, Park, Shin, Kim, Shimomura, Koike, Yoo, Chen: "Dual attenuation of proteasomal and autophagic BMAL1 degradation in Clock Δ19/+ mice contributes to improved glucose homeostasis." in: **Scientific reports**, Vol. 5, pp. 12801, (2017) (PubMed).

He, Wang, Han, Jin, Li, Wu, Ma, Cheng, Tang, Yang, Liu: "Nrf2 signalling and autophagy are involved in diabetes mellitus-induced defects in the development of mouse placenta." in: **Open biology**, Vol. 6, Issue 7, (2017) (PubMed).

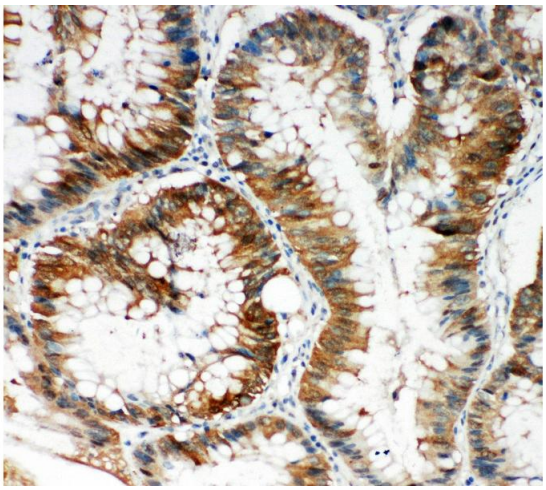
Li, Jen, Wu, Lee, Fang, Quigley, Lee, Wang, Zhou, Vergnes, Chen, Li, Reue, Ann, Hsiai: "Disturbed Flow Induces Autophagy, but Impairs Autophagic Flux to Perturb Mitochondrial Homeostasis." in: **Antioxidants & redox signaling**, Vol. 23, Issue 15, pp. 1207-19, (2016) (PubMed).

Images



Western Blotting

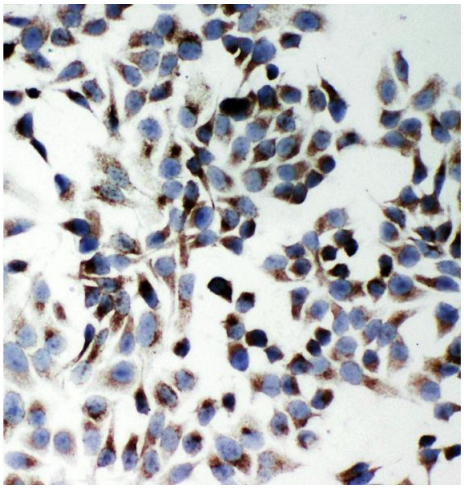
Image 1. Anti-SQSTM1/p62 antibody, Western blotting Lane 1: Rat Brain Tissue Lysate Lane 2: HELA Cell Lysate Lane 3: U87 Cell Lysate Lane 4: A549 Cell Lysate



Immunohistochemistry

Image 2. Anti-SQSTM1/p62 antibody, IHC(P) IHC(P): Human Intestinal Cancer Tissue

Images



Immunohistochemistry

Image 3. Anti-SQSTM1/p62 antibody, ICC ICC: Hela Cell