

Rabbit P62/SQSTM1 Polyclonal Antibody | anti-SQSTM1 antibody

P62/SQSTM1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322032	Rabbit	Human, Mouse, Rat	Immunohistochemistry, ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

P62/SQSTM1; Polyclonal Antibody; P62/SQSTM1 Antibody; A170; DMRV; EBI 3 associated protein of 60 kDa; EBI 3 associated protein p60; EBI3 associated protein of 60 kDa; EBI3 associated protein p60; EBI3-associated protein of 60 kDa; EBIAP; FTDALS3; MGC127197; ORCA; OSF-6; Osi; OSIL; Oxidative stress induced like; p60; p62; p62B; Paget disease of bone 3; PDB 3; PDB3; Phosphotyrosine independent ligand for the Lck SH2 domain of 62 kDa; Phosphotyrosine independent ligand for the Lck SH2 domain p62; Phosphotyrosine-independent ligand for the Lck SH2 domain of 62 kDa; PKC-zeta-interacting protein; Protein kinase C-zeta-interacting protein; Sequestosome 1; Sequestosome-1; SQSTM 1; SQSTM_HUMAN; Sqstm1; STAP; STONE14; Ubiquitin binding protein p62; Ubiquitin-binding protein p62; ZIP 3; ZIP; ZIP3; anti-SQSTM1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	P62/SQSTM1 antibody detects endogenous levels of total P62/SQSTM1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	356
Applicable Applications for anti-SQSTM1 antibody	IHC (Immunohistochemistry), ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human P62/SQSTM1
Subcellular Location	Cytoplasm. Late Endosome. Nucleus. Sarcomere (By similarity). In cardiac muscles localizes to the sarcomeric band (By similarity). Localizes to late endosomes. May also localize to the nucleus. Accumulates in neurofibrillary tangles and in Lewy bodies of neurons from individuals with Alzheimer and Parkinson disease respectively. Enriched in Rosenthal fibers of pilocytic astrocytoma. In liver cells, accumulates in Mallory bodies associated with alcoholic hepatitis, Wilson disease, indian childhood cirrhosis and in hyaline bodies associated with hepatocellular carcinoma.
Tissue Specificity	Ubiquitously expressed.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Chicken
Similarity	Pig (100%), Zebrafish (92%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Chicken (85%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis of extracts of various celllines, using P62/SQSTM1 Antibody.



WB (Western Blot)
Western blot analysis of P62/SQSTM1 expression in HeLa. The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of P62/SQSTM1 expression in various lysates



IF (Immunofluorescence)
AAA322032 staining A549 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

Related Product Information for anti-SQSTM1 antibody References	Description: Adapter protein which binds ubiquitin and may regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. Adapter that mediates the interaction between TRAF6 and CYLD (By similarity). May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels. Function: Autophagy receptor required for selective macroautophagy (aggrephagy). Functions as a bridge between polyubiquitinated cargo and autophagosomes. Interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family (PubMed:16286508, PubMed:20168092, PubMed:24128730, PubMed:28404643, PubMed:22622177). Along with WDFY3, involved in the formation and autophagic degradation of cytoplasmic ubiquitin-containing inclusions (p62 bodies, ALIS/aggresome-like induced structures). Along with WDFY3, required to recruit ubiquitinated proteins to PML bodies in the nucleus (PubMed:24128730, PubMed:20168092). May regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. Adapter that mediates the interaction between TRAF6 and CYLD (By similarity). May be involved in cell differentiation, apoptosis, immune response and regulation of K+ channels. Involved in endosome organization by retaining vesicles in the perinuclear cloud: following ubiquitination by RNF26, attracts specific vesicle-associated adapters, forming a molecular bridge that restrains cognate vesicles in the perinuclear region and organizes the endosomal pathway for efficient cargo transport (PubMed:27368102). Subunit Structure: Homooligomer or heterooligomer; may form homotypic arrays. Dimerization interferes with ubiquitin binding. Interacts directly with PRKCI and PRKCZ (Probable). Forms ternary complexes with PRKCZ and KCNAB2 or PRKCZ and GABBR3. Also interacts with KCNAB1, GABRR1, GABRR2 and GABRR3. Forms an NGF-induced complex with IKBKB, PRKCI and TRAF6 (By similarity). Interacts with EBI3, LCK, RASA1, PRKCZ, PRKCI, NR2F2, NTRK1, NTRK2, NTRK3, NBR1, MAP2K5, TRIM13, TRIM55 and MAPKAPK5. Interacts with the proteasome subunits PSMD4 and PSMC2. Interacts with K63-polyubiquitinated MAPT/TAU. Interacts with IKBKB through PRKCZ and PRKCI. Interacts with NGFR through TRAF6 and bridges that complex to NTRK1. Forms a complex with MAP2K5 and PRKCZ or PRKCI. Component of a ternary complex with PAWR and PRKCZ. Upon TNF-alpha stimulation, interacts with RIPK1 probably bridging IKBKB to the TNF-R1 complex composed of TNF-R1/TNFRSF1A, TRADD and RIPK1. Forms a complex with JUB/Ajuba, PRKCZ and TRAF6. Interacts with TRAF6 and CYLD. Identified in a complex with TRAF6 and CYLD (By similarity). Identified in a heterotrimeric complex with ubiquitin and ZFAND5, where ZFAND5 and SQSTM1 both interact with the same ubiquitin molecule. Directly interacts with MAP1LC3A and MAP1LC3B, as well as with other MAP1 LC3 family members, including GABARAP, GABARAPL1 and GABARAPL2; these interactions are necessary for the recruitment MAP1 LC3 family members to inclusion bodies containing polyubiquitinated protein aggregates and for their degradation by autophagy. Interacts with FHOD3. Interacts with TRIM5. Interacts with SESN1 (PubMed:23274085). Interacts with SESN2 (PubMed:23274085, PubMed:25040165). Interacts with ULK1 (PubMed:25040165). Interacts with UBD (PubMed:25422469). Interacts with WDR81; the interaction is direct and regulates the interaction of SQSTM1 with ubiquitinated proteins (PubMed:28404643). Interacts with WDFY3; this interaction is required to recruit WDFY3 to cytoplasmic bodies and to PML bodies (PubMed:20168092). Interacts with TRIM23 (PubMed:28871090). Interacts with LRRC25 (PubMed:29288164). Post-translational Modifications: Phosphorylated. May be phosphorylated by PRKCZ (By similarity). Phosphorylated in vitro by TTN. Phosphorylation at Ser-403 by ULK1 is stimulated by SESN2 (PubMed:25040165). Ubiquitinated by RNF26: ubiquitinated SQSTM1 attracts specific vesicle-associated adapters, forming a molecular bridge that restrains cognate vesicles in the perinuclear region and organizes the endosomal pathway for efficient cargo transport (PubMed:27368102). Deubiquitination by USP15 releases target vesicles for fast transport into the cell periphery (PubMed:27368102). Similarity: The UBA domain binds specifically 'Lys-63'-linked polyubiquitin chains of polyubiquitinated substrates. Mediates the interaction with TRIM55. Both the UBA and PB1 domains are necessary and sufficient for the localization into the ubiquitin-containing inclusion bodies. The PB1 domain mediates homooligomerization and interactions with FHOD3, MAP2K5, NBR1, PRKCI, PRKCZ and WDR81. Both the PB1 and UBA domains are necessary and sufficient for the localization into the ubiquitin-containing inclusion bodies. The ZZ-type zinc finger mediates the interaction with RIPK1. The LIR (LC3-interacting region) motif mediates the interaction with ATG8 family proteins. Tang Z, Cui K, Luan Y, Ruan Y, Wang T, Yang J, Wang S, Liu J, Wang D; Journal: Andrology. Human tissue kallikrein 1 ameliorates erectile function via modulation of macroautophagy in aged transgenic rats. Wang H, Mao B, Chen C; Journal: Evid Based Complement Alternat Med. Xiaoqinglong Decoction Attenuates Chronic Obstructive Pulmonary Disease in Rats via Inhibition of Autophagy. Wu D, Huang CJ, Jiao XF, Ding ZM, Zhang JY, Chen F, Wang YS, Li X, Huo LJ; Journal: Oncotarget. Olaquinox disrupts tight junction integrity and cytoskeleton architecture in mouse Sertoli cells. Wu CZ, Zheng JJ, Bai YH, Xia P, Zhang HC, Guo Y; Journal: Onco Targets Ther. HMGB1/RAGE axis mediates the apoptosis, invasion, autophagy, and angiogenesis of the renal cell carcinoma. Xia G, Zhu T, Li X, Jin Y, Zhou J, Xiao J; Journal: Mol Med Rep. ROS-mediated autophagy through the AMPK signaling pathway protects INS-1 cells from human islet amyloid polypeptide-induced cytotoxicity.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	214830438
NCBI GeneID	8878
NCBI Accession #	NP_001135770.1
NCBI GenBank Nucleotide #	NM_001142298.1
UniProt Accession #	Q13501; Q13446; Q9BUV7; Q9BVS6; Q9UEU1; A6NFN7; B2R661; B3KUW5
Molecular Weight	Observed: 62 kDa Predicted: 48 kDa
NCBI Official Full Name	sequestosome-1 isoform 2
NCBI Official Synonym Full Names	sequestosome 1
NCBI Official Symbol	SQSTM1
NCBI Official Synonym Symbols	p60; p62; A170; DMRV; OSIL; PDB3; ZIP3; p62B; NADGP; FTDALS3
NCBI Protein Information	sequestosome-1
UniProt Protein Name	Sequestosome-1
UniProt Gene Name	SQSTM1
UniProt Synonym Gene Names	ORCA; OSIL; EBIAP; p60

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/p62-sqstm1-antibody-immunohistochemistry-immunocytochemistry-immunofluorescence-western-blot-elisa/322032>