

SQSTM1 (p62) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP2183b**Specification****SQSTM1 (p62) Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q13501](#)**SQSTM1 (p62) Antibody (C-term) Blocking peptide - Additional Information****Gene ID 8878****Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody <a>AP2183b was selected from the C-term region of human SQSTM1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SQSTM1 (p62) Antibody (C-term) Blocking peptide - Protein Information**SQSTM1 (p62) Antibody (C-term) Blocking peptide - Background**

SQSTM1/p62 is an adapter protein which binds ubiquitin and may regulate the activation of NFκB1 by TNF-α, 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.

SQSTM1 (p62) Antibody (C-term) Blocking peptide - References

Seibenhener, M.L., et al., Mol. Cell. Biol. 24(18):8055-8068 (2004). Eekhoff, E.W., et al., Arthritis Rheum. 50(5):1650-1654 (2004). Brajenovic, M., et al., J. Biol. Chem. 279(13):12804-12811 (2004). Kuusisto, E., et al., J. Neuropathol. Exp. Neurol. 62(12):1241-1253 (2003). Johnson-Pais, T.L., et al., J. Bone Miner. Res. 18(10):1748-1753 (2003).

Name SQSTM1**Synonyms** ORCA, OSIL**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:http://www.uniprot.org/citations/27368102)

target="_blank">27368102). Promotes relocalization of 'Lys-63'-linked ubiquitinated STING1 to autophagosomes (PubMed:29496741). Acts as an activator of the NFE2L2/NRF2 pathway via interaction with KEAP1: interaction inactivates the BCR(KEAP1) complex, promoting nuclear accumulation of NFE2L2/NRF2 and subsequent expression of cytoprotective genes (PubMed:20452972, PubMed:28380357).

Cellular Location

Cytoplasm, cytosol. Late endosome. Lysosome. Cytoplasmic vesicle, autophagosome. Nucleus. Endoplasmic reticulum. Nucleus, PML body. Cytoplasm, myofibril, sarcomere. Note=In cardiac muscle, localizes to the sarcomeric band (By similarity). Commonly found in inclusion bodies containing polyubiquitinated protein aggregates. In neurodegenerative diseases, detected in Lewy bodies in Parkinson disease, neurofibrillary tangles in Alzheimer disease, and HTT aggregates in Huntington disease. In protein aggregate diseases of the liver, found in large amounts in Mallory bodies of alcoholic and nonalcoholic steatohepatitis, hyaline bodies in hepatocellular carcinoma, and in SERPINA1 aggregates Enriched in Rosenthal fibers of pilocytic astrocytoma. In the cytoplasm, observed in both membrane-free ubiquitin-containing protein aggregates (sequestosomes) and membrane-surrounded autophagosomes Colocalizes with TRIM13 in the perinuclear endoplasmic reticulum. Co- localizes with TRIM5 in cytoplasmic bodies. When nuclear export is blocked by treatment with leptomycin B, accumulates in PML bodies

Tissue Location

Ubiquitously expressed.

SQSTM1 (p62) Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

SQSTM1 (p62) Antibody (C-term) Blocking peptide - Citations

- [Interference with HMGB1 increases the sensitivity to chemotherapy drugs by inhibiting HMGB1-mediated cell autophagy and inducing cell apoptosis.](#)