

SQSTM1 Antibody (Center S207) Blocking Peptide Synthetic peptide

Catalog # BP19360c

Specification

SQSTM1 Antibody (Center S207) Blocking Peptide - Product Information

Primary Accession <u>013501</u>

SQSTM1 Antibody (Center S207) 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

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 Antibody (Center S207) Blocking Peptide - Protein Information

Name SQSTM1

Synonyms ORCA, OSIL

Function

Autophagy receptor required for selective macroautophagy (aggrephagy). Functions as a bridge between polyubiquitinated cargo and autophagosomes. Interacts

SQSTM1 Antibody (Center S207) Blocking Peptide - Background

This gene encodes a multifunctional protein that bindsubiquitin and regulates activation of the nuclear factor kappa-B(NF-kB) signaling pathway. The protein functions as ascaffolding/adaptor protein in concert with TNF receptor-associatedfactor 6 to mediate activation of NF-kB in response to upstreamsignals. Alternatively spliced transcript variants encoding eitherthe same or different isoforms have been identified for this gene.Mutations in this gene result in sporadic and familial Pagetdisease of bone.

SQSTM1 Antibody (Center S207) Blocking Peptide - References

Visconti, M.R., et al. J. Bone Miner. Res. 25(11):2368-2373(2010)Ding, W.X., et al. J. Biol. Chem. 285(36):27879-27890(2010)Gao, C., et al. Nat. Cell Biol. 12(8):781-790(2010)Jain, A., et al. J. Biol. Chem. 285(29):22576-22591(2010)Lau, A., et al. Mol. Cell. Biol. 30(13):3275-3285(2010)



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 ubiguitinated 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 ubiguitination. 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 ubiguitination 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:<a href=" http://www.uniprot.org/citations/27368102" target=" blank">27368102). Promotes relocalization of 'Lys-63'-linked ubiguitinated 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 polyubiguitinated 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 Antibody (Center S207) Blocking Peptide - Protocols

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

Blocking Peptides