

## **SQSTM1** Antibody (C-Terminus)

**Rabbit Polyclonal Antibody** Catalog # ALS13539

#### **Specification**

#### **SQSTM1** Antibody (C-Terminus) - Product Information

Application IF, WB, IHC **Primary Accession** <u>013501</u>

Reactivity Human, Mouse,

Rat

Host **Rabbit** Clonality **Polyclonal** Calculated MW 48kDa KDa

SQSTM1 Antibody (C-Terminus) - 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** Human SQSTM1

## **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

## **Precautions**

SQSTM1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

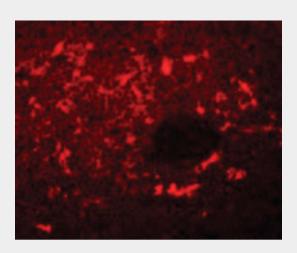
SQSTM1 Antibody (C-Terminus) - Protein Information

Name SQSTM1

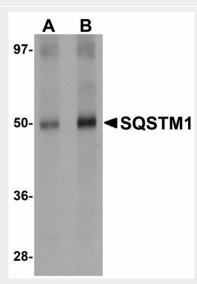
Synonyms ORCA, OSIL

#### Function

Autophagy receptor required for selective



Immunofluorescence of SQSTM1 in Rat Spleen cells with SQSTM1 antibody at 20 ug/ml.



Western blot of SQSTM1 in Human spleen tissue lysate with SQSTM1 antibody at (A) 1 and (B) 2 ug/ml.



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:<a href="http:// www.uniprot.org/citations/16286508" target=" blank">16286508</a>, PubMed:<a href="http://www.uniprot.org/ci

tations/20168092"

target=" blank">20168092</a>,

PubMed:<a href="http://www.uniprot.org/ci tations/24128730"

target=" blank">24128730</a>.

PubMed:<a href="http://www.uniprot.org/ci tations/28404643"

target=" blank">28404643</a>,

PubMed:<a href="http://www.uniprot.org/ci tations/22622177"

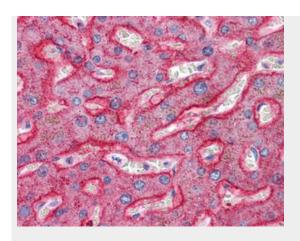
target=" blank">22622177</a>). Along with WDFY3, involved in the formation and autophagic degradation of cytoplasmic ubiquitin-containing inclusions (p62 bodies, ALIS/aggresome-like induced structures). Along with WDFY3, required to recruit ubiquitinated proteins to PML bodies in the nucleus (PubMed:<a href="http://www.unip rot.org/citations/24128730"

target=" blank">24128730</a>,

PubMed:<a href="http://www.uniprot.org/ci tations/20168092"

target=" blank">20168092</a>). 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:<a href=" http://www.uniprot.org/citations/27368102" target=" blank">27368102</a>). Promotes relocalization of 'Lys-63'-linked ubiquitinated STING1 to autophagosomes (PubMed:<a href="http://www.uniprot.org/c

itations/29496741" target=" blank">29496741</a>). Acts as



Anti-SQSTM1 antibody IHC of human liver.

# **SQSTM1** Antibody (C-Terminus) -**Background**

Autophagy receptor that interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family. Required both for the formation and autophagic degradation of polyubiquitin-containing bodies, called ALIS (aggresome-like induced structures) and links ALIS to the autophagic machinery. Involved in midbody ring degradation. 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.

# **SQSTM1** Antibody (C-Terminus) -References

Devergne O., et al.J. Virol. 70:1143-1153(1996). Joung I., et al. Proc. Natl. Acad. Sci. U.S.A. 93:5991-5995(1996). Ota T., et al. Nat. Genet. 36:40-45(2004). Schmutz J., et al. Nature 431:268-274(2004). Vadlamudi R.K., et al. FEBS Lett. 435:138-142(1998).



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:<a href="http://www.uniprot.org/citations/20452972" target="\_blank">20452972</a>, PubMed:<a href="http://www.uniprot.org/citations/28380357" target=" blank">28380357</a>).

## **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 Antibody (C-Terminus) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence





ImmunoprecipitationFlow CytometyCell Culture