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Sqstm1(S351) Blocking Peptide

Synthetic peptide
Catalog # BP20690b

Specification

Sqstm1(S351) Blocking Peptide - Product Information

Primary Accession	Q64337
Other Accession	O08623, Q13501

Sqstm1(S351) Blocking Peptide - Additional Information

Gene ID 18412

Other Names
Sequestosome-1, STONE14, Ubiquitin-binding protein p62, Sqstm1, A170, STAP

Target/Specificity
The synthetic peptide sequence is selected from aa 346-359 of HUMAN Sqstm1

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(S351) Blocking Peptide - Protein Information

Name Sqstm1

Synonyms A170, STAP

Function
Autophagy receptor required for selective macroautophagy (aggrephagy). Functions

Sqstm1(S351) Blocking Peptide - Background

Required both for the formation and autophagic degradation of polyubiquitin-containing bodies, called ALIS (aggresome-like induced structures). Links ALIS to the autophagic machinery via direct interaction with MAP1 LC3 family members. 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. May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels. Adapter that mediates the interaction between TRAF6 and CYLD.

Sqstm1(S351) Blocking Peptide - References

Ishii T.,et al.Biochem. Biophys. Res. Commun. 226:456-460(1996).
Morris J.C.,et al.Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
Carninci P.,et al.Science 309:1559-1563(2005).
Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).
Ishii T.,et al.Biochem. Biophys. Res. Commun. 232:33-37(1997).

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. 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 (By similarity). 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 (PubMed:14960283, PubMed:18382763). 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 (By similarity). Promotes relocalization of 'Lys-63'-linked ubiquitinated STING1 to autophagosomes (By similarity). 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:20421418, PubMed:20173742).

Cellular Location

Cytoplasm, cytosol. Late endosome. Nucleus Endoplasmic reticulum. Lysosome. Cytoplasmic vesicle, autophagosome Nucleus, PML body {ECO:0000250|UniProtKB:Q13501}. Cytoplasm, myofibril, sarcomere. Note=In cardiac muscles, localizes to the sarcomeric

band (By similarity). May also localize to the hepatocellular carcinoma (By similarity). Colocalizes with TRIM13 in the perinuclear endoplasmic reticulum (By similarity). Commonly found in inclusion bodies containing polyubiquitinated protein aggregates (PubMed:20421418). Co-localizes with TRIM5 in the cytoplasmic bodies (By similarity). When nuclear export is blocked by treatment with leptomycin B, accumulates in PML bodies (By similarity). {ECO:0000250|UniProtKB:Q13501, ECO:0000269|PubMed:20421418}

Tissue Location
Widely expressed..

Sqstm1(S351) Blocking Peptide - Protocols

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

- Blocking Peptides