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AP20066PU-N Polyclonal Antibody to SQSTM1 (C-term) - Aff - Purified

Alternate names: EBI3-associated protein of 60 kDa, EBIAP, ORCA, OSIL, Phosphotyrosine-independent ligand for the Lck SH2 domain of 62 kDa, Sequestosome-1, Ubiquitin-binding protein p62, p60, p62

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

Background: SQSTM1/p62 is an adapter protein which binds ubiquitin and regulates signaling cascades through ubiquitination. It may regulate the activation of NF-kappaB by TNF-alpha, nerve growth factor (NGF) and interleukin-1. SQSTM1/p62, a co-interacting protein of the atypical PKC isoforms, has a UBA domain at its C-terminal end, which binds non-covalently to polyubiquitin chain. SQSTM1's UBA domain is necessary for recruitment of polyubiquitin and aggresome formation. SQSTM1 may play a role in titin/TTN downstream signaling in muscle cells and may be involved in cell differentiation, apoptosis, immune response and regulation of K+ channels. Mutations in the ubiquitin-associated (UBA) domain of SQSTM1 commonly cause Paget's disease of bone since the UBA is necessary for aggregate sequestration and cell survival.

Uniprot ID: Q13501

NCBI: NP_001135770

GeneID: 8878

Host / Isotype: Rabbit / IgG

Immunogen: SQSTM1 antibody was raised against a 14 amino acid peptide from near the carboxy terminus of Human SQSTM1.

Format:
State: Liquid purified IgG fraction
Purification: Immunoaffinity Chromatography
Buffer System: PBS containing 0.02% Sodium Azide as preservative

Applications:
ELISA.
Western blot: SQSTM1 antibody can be used for the detection of SQSTM1 at 1–2 µg/ml.
Positive Control: Human Spleen Tissue Lysate.
Immunohistochemistry on paraffin sections.
Positive Control: Rat Spleen Tissue Lysate.
Immunofluorescence: 20 µg/ml.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Species Reactivity: **Tested:** Human, Mouse and Rat.

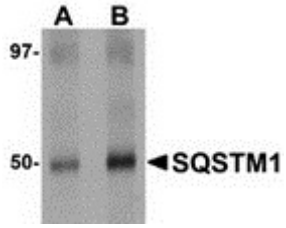
Storage: Upon receipt store the antibody (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

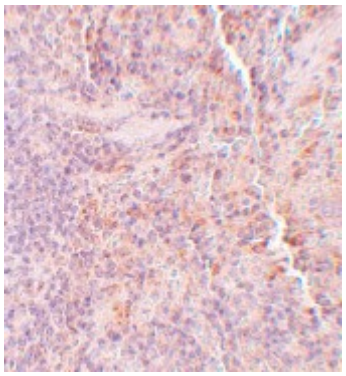
1. Seibenhener ML, Babu JR, Geetha T, Wong HC, Krishna NR, Wooten MW. Sequestosome 1/p62 is a polyubiquitin chain binding protein involved in ubiquitin proteasome degradation. Mol Cell Biol. 2004 Sep;24(18):8055-68. PubMed PMID: 15340068.
2. Hocking LJ, Lucas GJ, Daroszewska A, Mangion J, Olavesen M, Cundy T, et al. Domain-specific mutations in sequestosome 1 (SQSTM1) cause familial and sporadic Paget's disease. Hum Mol Genet. 2002 Oct 15;11(22):2735-9. PubMed PMID: 12374763.
3. Rousiere M, Michou L, Cornelis F, et al. Paget's disease of bone. Best Pract. Res. Clin. Rheumatol. 2003; 17:1019-41.
4. Layfield R, Ciani B, Ralston SH, Hocking LJ, Sheppard PW, Searle MS, et al. Structural and functional studies of mutations affecting the UBA domain of SQSTM1 (p62) which cause Paget's disease of bone. Biochem Soc Trans. 2004 Nov;32(Pt 5):728-30. PubMed PMID: 15493999.

Pictures:

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



Immunohistochemistry of SQSTM1 in rat spleen tissue with SQSTM1 antibody at 5 ug/ml.



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