



SQSTM1 Polyclonal Antibody

E90682

Catalog Number: E90682

Amount: 100ul

Background: Sequestosome 1 (SQSTM1, p62) is a ubiquitin binding protein involved in cell signaling, oxidative stress, and autophagy (1-4). It was first identified as a protein that binds to the SH2 domain of p56Lck (5), and independently found to interact with PKC ζ (6,7). SQSTM1 was subsequently found to interact with ubiquitin, providing a scaffold for several signaling proteins and triggering degradation of proteins through the proteasome or lysosome (8). Interaction between SQSTM1 and TRAF6 leads to the K63-linked polyubiquitination of TRAF6 and subsequent activation of the NF- κ B pathway (9). Protein aggregates formed by SQSTM1 can be degraded by the autophagosome (4,10,11). SQSTM1 binds autophagosomal membrane protein LC3/Atg8, bringing SQSTM1-containing protein aggregates to the autophagosome (12). Lysosomal degradation of autophagosomes leads to a decrease in SQSTM1 levels during autophagy; conversely, autophagy inhibitors stabilize SQSTM1 levels. Studies have demonstrated a link between SQSTM1 and oxidative stress. SQSTM1 interacts with KEAP1, which is a cytoplasmic inhibitor of NRF2, a key transcription factor involved in cellular responses to oxidative stress (3). Thus, accumulation of SQSTM1 can lead to an increase in NRF2 activity.

Species: Rabbit

Isotype: IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: SQSTM1;A170;OSIL;PDB3;ZIP3;p60;p62;p62B ;

Immunogen: Recombinant protein of human SQSTM1

Purification: Affinity purification

Reactivity: H M R

Applications: WB IHC

Molecular Weight: 48kDa

Swiss-Prot No. : Q13501

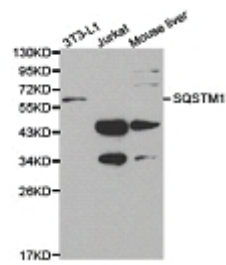
Gene ID: 8878

References: 1. Kirkin, V. et al. (2009) Mol Cell 34, 259-69. 2. Seibenhener, M.L. et al. (2007) FEBS Lett 581, 175-9. 3. Komatsu, M. et al. (2010) Nat Cell Biol 12, 213-23. 4. Bjørkøy, G. et al. (2006) Autophagy 2, 138-9. 5. Joung, I. et al. (1996) Proc Natl Acad Sci USA 93, 5991-5. 6. Sanchez, P. et al. (1998) Mol Cell Biol 18, 3069-80. 7. Puls, A. et al. (1997) Proc Natl Acad Sci USA 94, 6191-6. 8. Vadlamudi, R.K. et al. (1996) J Biol Chem 271, 20235-7. 9. Wooten, M.W. et al. (2005) J Biol Chem 280, 35625-9. 10. Bjørkøy, G. et al. (2005) J Cell Biol 171, 603-14. 11. Komatsu, M. et al. (2007) Cell 131, 1149-63. 12. Pankiv, S. et al. (2007) J Biol Chem 282, 24131-45.

For Research Use Only

WB 1:500 - 1:2000

IHC 1:50- 1:200



Western blot analysis of extracts of various cell lines,
using SQSTM1 antibody.