

## Product datasheet for **TA392541S**

### SQSTM1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:5000~1:10000 IHC: 1:50~1:200 IF: 1:50~1:200
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to Human SQSTM1.
Specificity:	SQSTM1 (R415) polyclonal antibody detects endogenous levels of SQSTM1 protein.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 56 kDa
Gene Name:	sequestosome 1
Database Link:	<a href="#">Entrez Gene 8878 Human Q13501</a>



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**Background:**

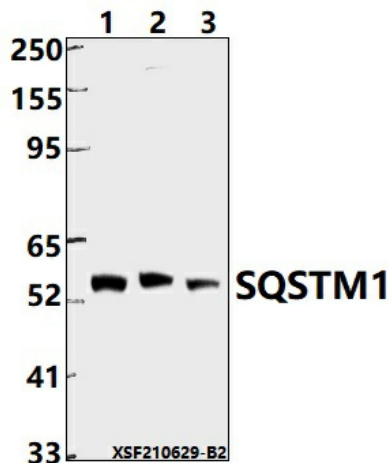
Sequestosome 1 (SQSTM1, p62) is a ubiquitin binding protein involved in cell signaling, oxidative stress, and autophagy. It was first identified as a protein that binds to the SH2 domain of p56Lck and independently found to interact with PKC $\zeta$ . SQSTM1 was subsequently found to interact with ubiquitin, providing a scaffold for several signaling proteins and triggering degradation of proteins through the proteasome or lysosome. Interaction between SQSTM1 and TRAF6 leads to the K63-linked polyubiquitination of TRAF6 and subsequent activation of the NF- $\kappa$ B pathway. Protein aggregates formed by SQSTM1 can be degraded by the autophagosome. SQSTM1 binds autophagosomal membrane protein LC3/Atg8, bringing SQSTM1-containing protein aggregates to the autophagosome. 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. Thus, accumulation of SQSTM1 can lead to an increase in NRF2 activity.

**Synonyms:**

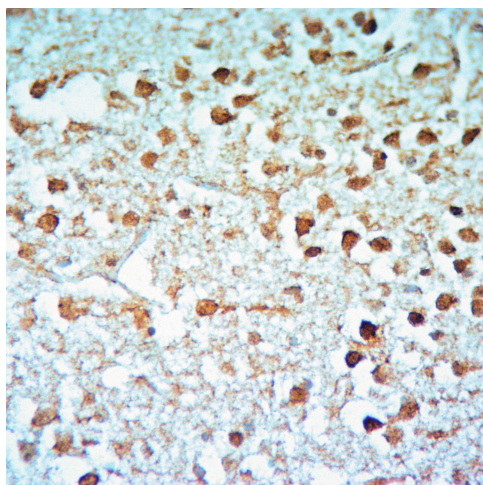
EBI3-associated protein of 60 kDa; EBIAP; ORCA; OSIL; p60; Phosphotyrosine-independent ligand for the Lck SH2 domain of 62 kDa; Sequestosome-1; SQSTM1; Ubiquitin-binding protein p62

**Note:**

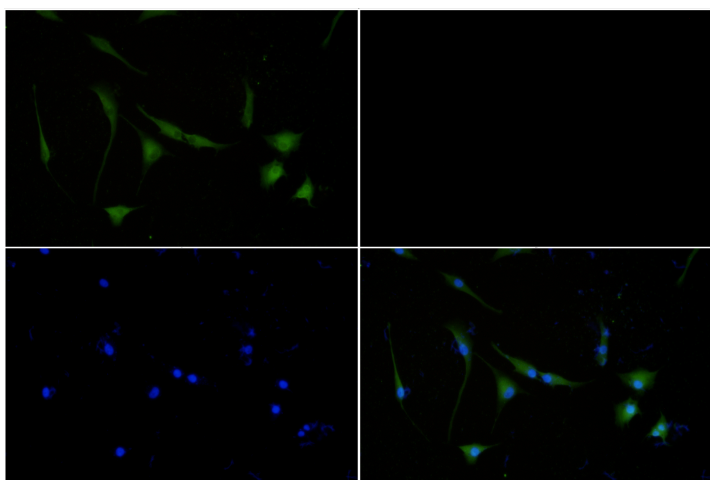
For research use only, not for use in diagnostic procedure.

**Product images:**

Western blot (WB) analysis of SQSTM1 (R415) polyclonal antibody at 1:5000 dilution  
Lane1:EC9706 whole cell lysate(40ug)  
Lane2:SHSY5Y whole cell lysate(40ug) Lane3:CT-26 whole cell lysate(40ug)



Immunohistochemistry of paraffin-embedded Rat Brain using SQSTM1 (R415) antibody at dilution of 1:50.



Immunofluorescence analysis of U-87MG cells using SQSTM1 (R415) antibody at dilution of 1:50.