

# **Product datasheet for TA392541**

## **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:** Entrez Gene 8878 Human

Q13501



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



#### 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 PKCζ. 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-κB 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.

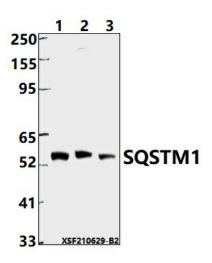
Synonyms:

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:

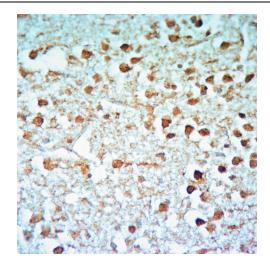
For research use only, not for use in diagnostic procedure.

### **Product images:**

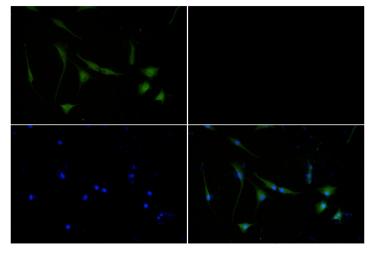


Western blot (WB) analysis of SQSTM1 (R415) polyclonal antibody at 1:5000 dilution Lane1:EC9706 whole cell lysate(40ug) Lane2:SHSY5Y whole cell lysate(40ug Lane3:CT-26 whole cell lysate(40ug)





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.