

## SQSTM1 (R415) polyclonal antibody

Catalog: BCP01549

Host: Rabbit

Reactivity: Human, Mouse

### 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.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 56 kDa

### Swiss-Prot:

Q13501

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:5000~1:10000

IHC: 1:50~1:200

IF: 1:50~1:200

### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

SQSTM1 (R415) polyclonal antibody detects endogenous levels of SQSTM1 protein.

### DATA:

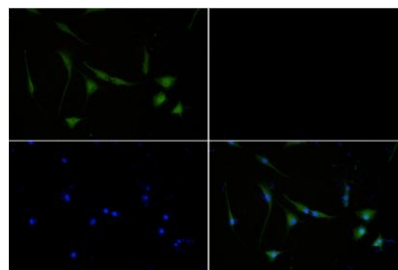


Western blot (WB) analysis of SQSTM1 (R415) polyclonal antibody at 1:5000 dilution

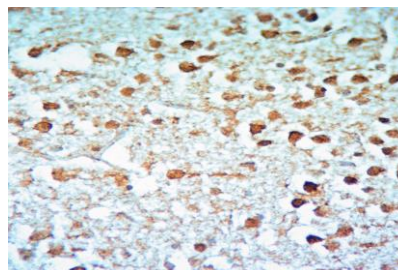
Lane1:EC9706 whole cell lysate(40ug)

Lane2:SHSY5Y whole cell lysate(40ug)

Lane3:CT-26 whole cell lysate(40ug)



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



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

### Note:

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

