

PRODUCT DATA SHEET

Bioworld Technology,Inc.

SQSTM1 (R415) polyclonal antibody

Catalog: AP0772 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 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.

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

IF: 1:50~1:200

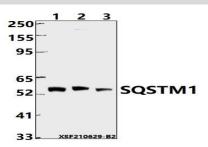
Storage&Stability:

Store at $4 \,\mathrm{C}$ short term. Aliquot and store at $-20 \,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

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

DATA:

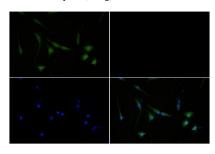


Western blot (WB) analysis of SQSTM1 (R415) polyclonal antibody at 1:5000 dilution

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.

Note:

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

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151



PRODUCT DATA SHEET

Bioworld Technology,Inc.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: info@bioworlde.com

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u> Tel: 0086-025-68037686 Fax: 0086-025-68035151