

Basic Information

Product Name	Anti-P62/SQSTM1 Antibody (Clone#3H11)	
Gene Name	SQSTM1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2a	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human SQSTM1/p62, identical to the related mouse and rat sequences.	
Concentration	200ug/ml	
Purification	protein G purified.	
Observed MW	62 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

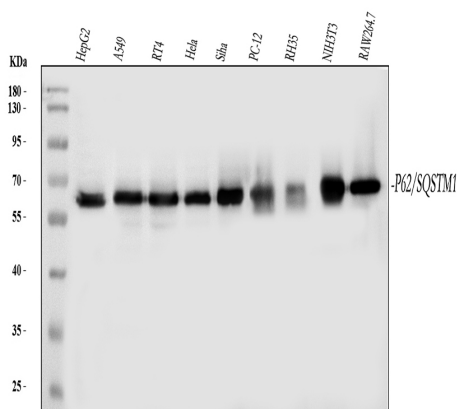
SQSTM1(Sequestosome-1), also known as Ubiquitin-Binding Protein P62 or P62, is a protein that in humans is encoded by the SQSTM1 gene. The Src homology type 2(SH2) domain is a highly conserved motif of about 100 amino acids which mediates protein-protein interactions by binding to phosphotyrosine.p56-lck, a T-cell-specific src family tyrosine kinase with an SH2 domain, is involved in T-cell signal transduction. The International Radiation Hybrid Mapping Consortium mapped the p62 gene to chromosome 5q35. Park et al.(1995) found that the p56-lck SH2 domain binds to p62 at the ser59 of p62 only when that serine is phosphorylated. Joungh et al.(1996) expressed epitope-tagged p62 in Hela cells and showed that the expressed protein bound to the lck SH2 domain and that this binding was dependent on the N-terminal 50 amino

acids of p62 but not on the tyrosine residue in this region.

Reference

Anti-P62/SQSTM1 Antibody (Clone#3H11)被引用在4文献中。

Selected Validation Data



Western blot analysis of anti-P62/SQSTM1 antibody (M00300-1).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human A549 whole cell lysates,

Lane 3: human RT4 whole cell lysates,

Lane 4: human Hela whole cell lysates,

Lane 5: human SiHa whole cell lysates,

Lane 6: rat PC-12 whole cell lysates,

Lane 7: rat RH-35 whole cell lysates,

Lane 8: mouse NIH/3T3 whole cell lysates,

Lane 9: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-P62/SQSTM1

antigen affinity purified monoclonal antibody (M00300-1) at a

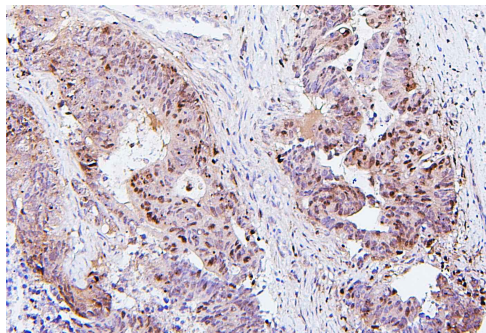
dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP

secondary antibody (Catalog # BA1050). The signal is developed

using ECL Plus Western Blotting Substrate (Catalog # AR1197). A

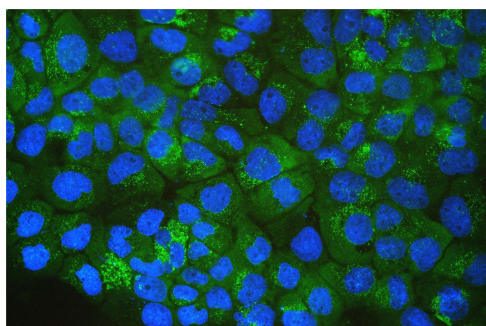
specific band was detected for P62/SQSTM1 at approximately 62

kDa. The expected band size for P62/SQSTM1 is at 48 kDa.

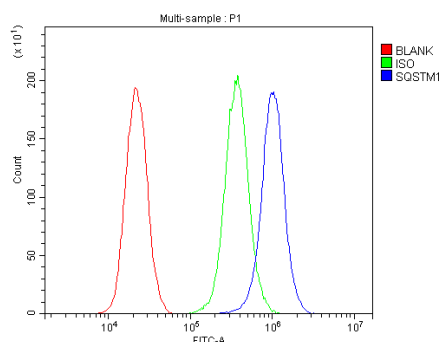


IHC analysis of P62/SQSTM1 using anti-P62/SQSTM1 antibody (M00300-1).

P62/SQSTM1 was detected in a paraffin-embedded section of human colon cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-P62/SQSTM1 Antibody (M00300-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of SQSTM1 using anti-SQSTM1 antibody (M00300-1). SQSTM1 was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/mL mouse anti-SQSTM1 Antibody (M00300-1) overnight at 4°C. DyLight488 Conjugated Goat Anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of PC-3 cells using anti-P62/SQSTM1 antibody (M00300-1).

Overlay histogram showing PC-3 cells stained with M00300-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-P62/SQSTM1 Antibody (M00300-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.