SQSTM1/p62 (ANT0051R) Rabbit mAb

CatalogNo: ANT8025 Recombinant

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species	Reactivity	Applications
• Rabbit	• Human,Mouse,Rat,	• WB,IHC,IF,IP,ELISA

MW	Isotype
• 48kD (Calculated) 60kD (Observed)	• IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1000
WB 1:500-5000
IF 1:200-1000
ELISA 1:5000-20000
IP 1:50-200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality	Monoclonal
Clone Number	ANT0051R

Immunogen Information Specificity

Endogenous

Target Information

Gene name SQSTM1 ORCA OSIL

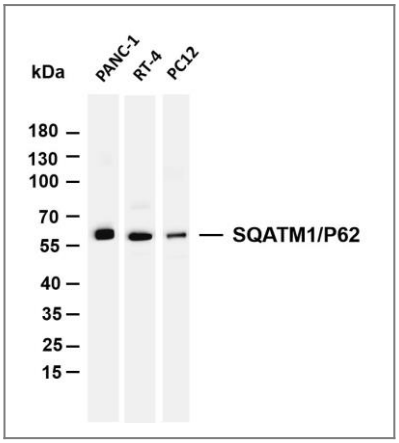
Protein Name SQSTM

Organism	Gene ID	UniProt ID
Human	8878;	Q13501;
Mouse	18412;	Q64337;
Rat	113894;	O08623;

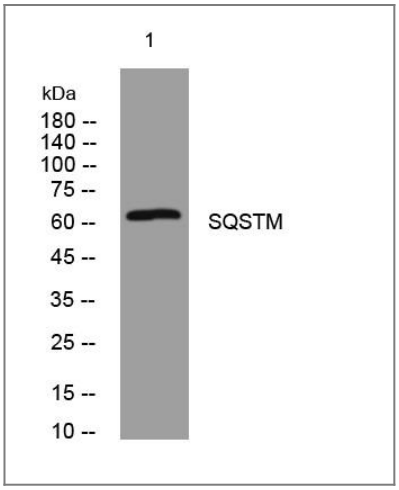
Cellular Localization Cytoplasm, Nuclear

Function Disease:Defects in SQSTM1 are a cause of sporadic and familial Paget disease of bone (PDB) [MIM:602080]. PDB is a metabolic bone disease affecting the axial skeleton and characterized by focal areas of increased and disorganized bone turn-over due to activated osteoclasts. Manifestations of the disease include bone pain, deformity, pathological fractures, deafness, neurological complications and increased risk of osteosarcoma. PDB is a chronic disease affecting 2 to 3% of the population above the age of 40 years.,Domain:The OPR domain mediates homooligomerization and interactions with PRKCZ, PRKCI, MAP2K5 and NBR1.,Domain:The UBA domain binds specifically 'Lys-63'linked polyubiquitin chains of polyubiquitinated substrates. Mediates the interaction with TRIM55.,Domain:The ZZ-type zinc finger mediates the interaction with RIPK1.,Function:Adapter protein which binds ubiquitin and may regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels.,induction:By proteasomal inhibitor PSI and prostaglandin J2 (PGJ2) (at protein level). By Phorbol 12-myristate 13-acetate (PMA).,ANTM:Phosphorylated. May be phosphorylated by PRKCZ (By similarity). Phosphorylated in vitro by TTN.,similarity:Contains 1 OPR domain.,similarity:Contains 1 UBA domain.,similarity:Contains 1 ZZ-type zinc finger.,subcellular location:Sarcomere (By similarity). In cardiac muscles localizes to the sarcomeric band (By similarity). Localizes to late endosomes. May also localize to the nucleus. Accumulates in neurofibrillary tangles and in Lewy bodies of neurons from individuals with Alzheimer and Parkinson disease respectively. Enriched in Rosenthal fibers of pilocytic astrocytoma. In liver cells, accumulates in Mallory bodies associated with alcoholic hepatitis, Wilson disease, indian childhood cirrhosis and in hyaline bodies associated with hepatocellular carcinoma.,subunit:Homooligomer or heterooligomer; may form homotypic arrays. Interacts directly with PRKCI and PRKCZ (Probable). Forms ternary complexes with PRKCZ and KCNAB2 or PRKCZ and GABBR3. Also interacts with KCNAB1, GABRR1, GABRR2 and GABRR3. Forms an NGF-induced complex with IKBKB, PRKCI and TRAF6 (By similarity). Interacts with EBI3, LCK, RASA1, PRKCZ, PRKCI, NR2F2, NTRK1, NTRK2, NTRK3, NBR1, MAP2K5, TRIM55 and MAPKAPK5. Interacts with the proteasome subunits PSMD4 and PSMC2. Interacts with K63-polyubiquitinated MAPT/TAU. Interacts with IKBKB through PRKCZ and PRKCI. Interacts with NGFR through TRAF6 and bridges that complex to NTRK1. Forms a complex with MAP2K5 and PRKCZ or PRKCI. Component of a ternary complex with PAWR and PRKCZ. Upon TNF-alpha stimulation, interacts with RIPK1 problably bridging IKBKB to the TNF-R1 complex composed of TNF-R1/TNFRSF1A, TRADD and RIPK1. Forms a complex with JUB/Ajuba, PRKCZ and TRAF6.,tissue specificity:Ubiquitously expressed.,

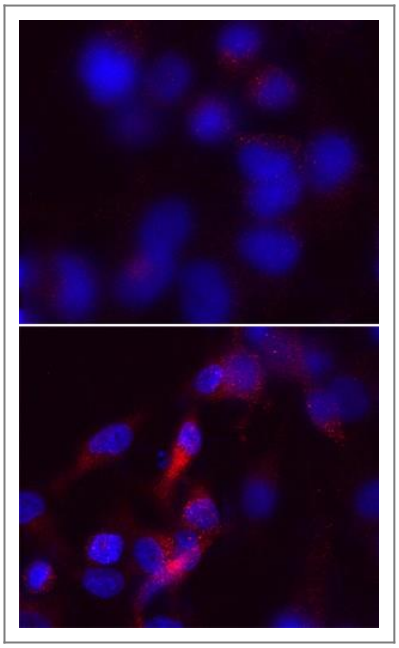
Validation Data



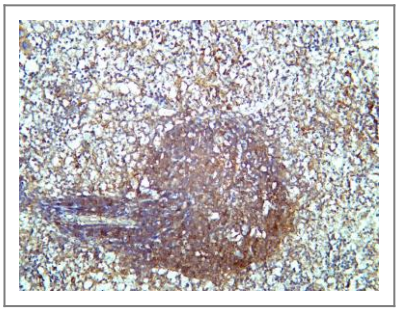
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SQATM1/P62 (ANT0051R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: PANC-1 Lane 2: RT-4 Lane 3: PC12 Predicted band size:
48kDa Observed band size: 62kDa



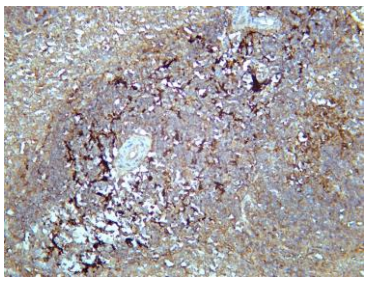
Western blot analysis of lysates from AD293 cells, primary antibody was diluted at 1:1000, 4°over night



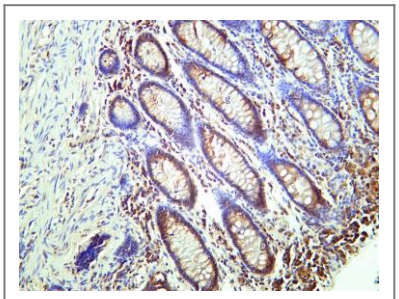
Immunofluorescence analysis of Hela cells treated or un-treated with UV 30MIN. 1,primary antibody(red) was diluted at 1:200(4°C,overnight). 2, AFlour 594 labled Secondary antibody was diluted at 1:300(room temperature, 50min).



Mouse spleen tissue was stained with Anti-SQSTM1/p62 (ANT0051R) rabbit Antibody



Rat spleen tissue was stained with Anti-SQSTM1/p62 (ANT0051R) rabbit Antibody



Human colon carcinoma tissue was stained with Anti-SQSTM1/p62 (ANT0051R) rabbit Antibody