

## Product datasheet for UM500012CF

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **SQSTM1 Mouse Monoclonal Antibody [Clone ID: UMAB12]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: UMAB12

**Applications:** FC, IF, IHC, WB

**Recommended Dilution:** WB 1:500~2000, IHC 1:150, IF 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human SQSTM1(NP\_003891) produced in

HEK293T cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 47.5 kDa

**Gene Name:** sequestosome 1

Database Link: NP 003891

Entrez Gene 18412 MouseEntrez Gene 113894 RatEntrez Gene 8878 Human

Q13501





### SQSTM1 Mouse Monoclonal Antibody [Clone ID: UMAB12] - UM500012CF

**Background:** This gene encodes a multifunctional protein that binds ubiquitin and regulates activation of

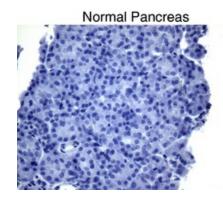
the nuclear factor kappa-B (NF-kB) signaling pathway. The protein functions as a

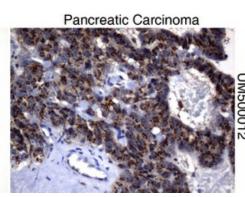
scaffolding/adaptor protein in concert with TNF receptor-associated factor 6 to mediate activation of NF-kB in response to upstream signals. Alternatively spliced transcript variants encoding either the same or different isoforms have been identified for this gene. Mutations in this gene result in sporadic and familial Paget disease of bone. [provided by RefSeq]

Synonyms: A170; OSIL; p60; p62; p62B; PDB3; ZIP3

Protein Families: Druggable Genome, Transcription Factors

# **Product images:**

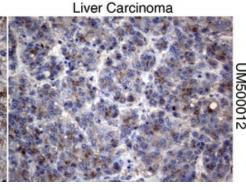




Immunohistochemical staining of paraffinembedded pancreas tissue using anti-SQSTM1mouse monoclonal antibody. (Clone UMAB12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

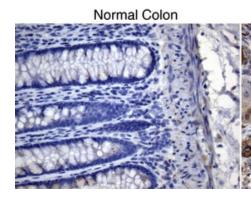


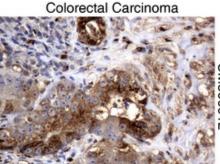
Normal Liver



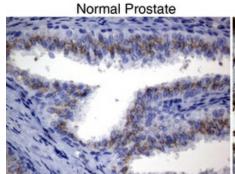
Immunohistochemical staining of paraffinembedded liver tissue using anti-SQSTM1mouse monoclonal antibody. (Clone UMAB12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

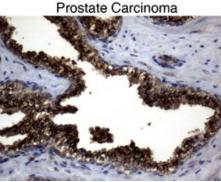




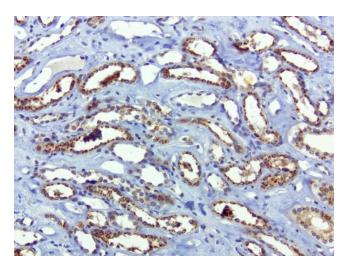


Immunohistochemical staining of paraffinembedded colon tissue using anti-SQSTM1mouse monoclonal antibody. (Clone UMAB12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



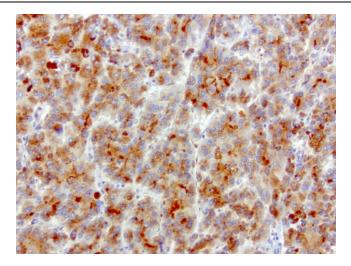


Immunohistochemical staining of paraffinembedded prostate tissue using anti-SQSTM1mouse monoclonal antibody. (Clone UMAB12, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

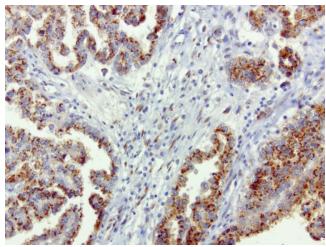


Immunohistochemical staining of paraffinembedded human kidney using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the tubule epithelial cells.

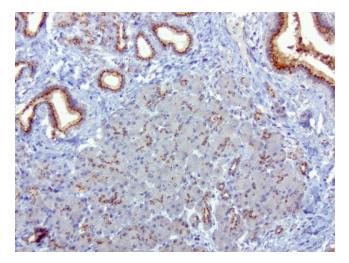




Immunohistochemical staining of paraffinembedded human liver cancer using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the tumor cells.

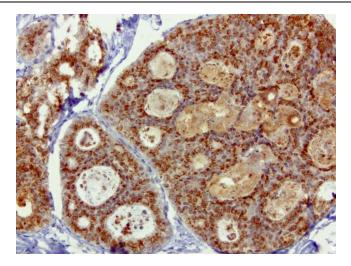


Immunohistochemical staining of paraffinembedded human ovarian cancer using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the tumor cells.

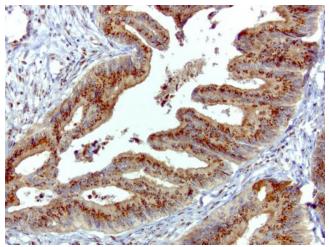


Immunohistochemical staining of paraffinembedded human pancreatic cancer using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Reduced cytoplasmic staining is seen in the tumor cells.

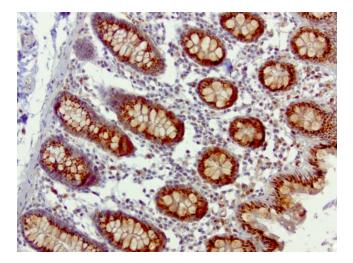




Immunohistochemical staining of paraffinembedded human breast cancer using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the tumor cells.

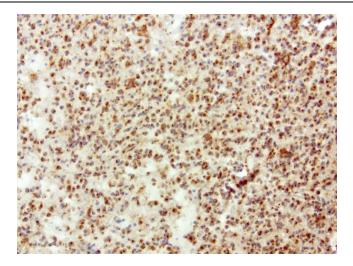


Immunohistochemical staining of paraffinembedded human colon cancer using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the tumor cells.

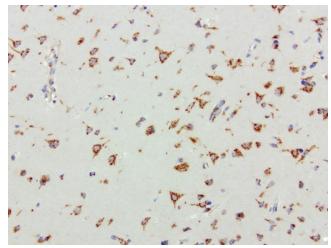


Immunohistochemical staining of paraffinembedded human colon using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the colon epithelial cells.

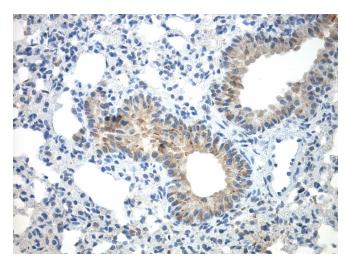




Immunohistochemical staining of paraffinembedded human glioma using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the tumor cells.

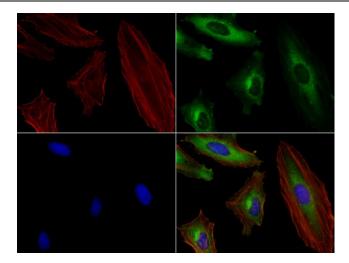


Immunohistochemical staining of paraffinembedded human brain using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody ([UM500012]) at 1:100 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI Accel pH 8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Strong cytoplasmic staining is seen in the nueral cells.

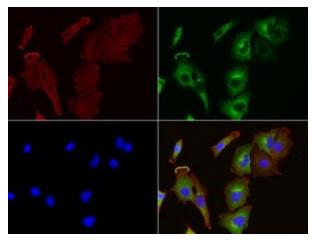


Immunohistochemical staining of paraffinembedded mouse lung tissue using anti-SQSTM1 clone UMAB12 mouse monoclonal antibody. HIER TEE buffer pH9 ([B21-100]) at 110C for 10 min, [UM500012] (1:100). Detection was done with Klear Mouse (C/N [D52-18]) DAB Kit.

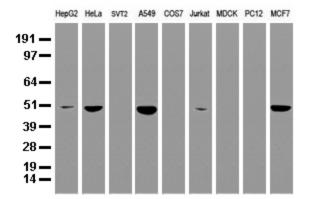




Immunofluorescent staining of HeLa cells using SQSTM1 mouse monoclonal antibody ([UM500012], green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.

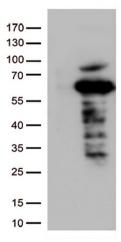


Immunofluorescent staining of 293T cells transfected by pCMV6-ENTRY SQSTM1 ([RC203214]) using anti-SQSTM1 antibody ([UM500012]/green, upper left; DAPI/blue, lower left; MERGED, upper right). 293T cells transfected with empty vector served as a negative control (MERGED, lower right) (1:100).

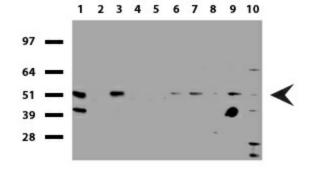


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-SQSTM1 monoclonal antibody (Clone UMAB12) at 1:500.

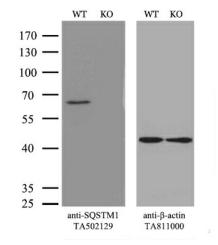




HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SQSTM1 ([RC203214], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SQSTM1 (1:500).

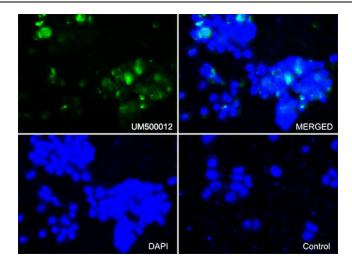


Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid 9: Colon, 10: Spleen). Diluation: 1:500.

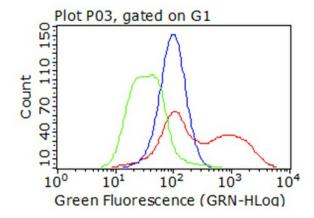


Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and SQSTM1-Knockout 293T cells (KO, Cat# [LC810279]) were separated by SDS-PAGE and immunoblotted with anti-SQSTM1 monoclonal antibody [UM500012], (1:500). Then the blotted membrane was stripped and reprobed with anti-b-actin antibody ([TA811000]) as a loading control.

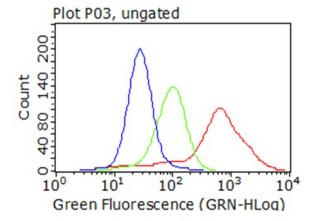




Immunofluorescent staining of 293T cells transfected by pCMV6-ENTRY SQSTM1 ([RC203214]) using anti-SQSTM1 antibody ([UM500012]/green, upper left; DAPI/blue, lower left; MERGED, upper right). 293T cells transfected with empty vector served as a negative control (MERGED, lower right) (1:100).

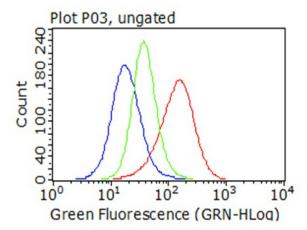


HEK293T cells transfected with either [RC203214] overexpress plasmid (Red), compared to an IgG isotype control, (Green) or empty vector control plasmid (Blue) were immunostained by anti-SQSTM1 antibody ([UM500012]), and then analyzed by flow cytometry (1:100).



Flow cytometric Analysis of living Hela cells, using anti-SQSTM1 antibody ([UM500012]), (Red), compared to an IgG isotype control, (green), and negative control (PBS), (Blue) (1:100).





Flow cytometric Analysis of living A549 cells, using anti-SQSTM1 antibody ([UM500012]), (Red), compared to an IgG isotype control, (green), and negative control (PBS), (Blue) (1:100).