

For Research Use Only

# P62/SQSTM1 Monoclonal antibody

Catalog Number: 66184-1-Ig

Featured Product

183 Publications



## Basic Information

### Catalog Number:

66184-1-Ig

### Size:

150ul, Concentration: 2000 ug/ml by Nanodrop;

### Source:

Mouse

### Isotype:

IgG2b

### Immunogen Catalog Number:

AG13131

### GenBank Accession Number:

BC017222

### GeneID (NCBI):

8878

### UNIPROT ID:

Q13501

### Full Name:

sequestosome 1

### Calculated MW:

48 kDa

### Observed MW:

62 kDa

### Purification Method:

Protein A purification

### CloneNo.:

1H5C1

### Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:2000-1:8000

IF/ICC: 1:400-1:1600

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human

### Cited Species:

human, pig, monkey, chicken, bovine, hamster

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HeLa cells, U2OS cells, K-562 cells, HEK-293 cells, MCF-7 cells, HepG2 cells, Jurkat cells, L02 cells, Raji cells

**IP**: U2OS cells,

**IHC**: human lung cancer tissue, human colon cancer tissue, human liver cancer tissue, human endometrial cancer tissue

**IF/ICC**: Chloroquine treated HepG2 cells, Starvation treated HepG2 cells, U2OS cells, Chloroquine treated U2OS cells

## Background Information

Sequestosome 1 (SQSTM1/p62) is a multifunctional adaptor protein implicated in selective autophagy, cell signaling pathways, and tumorigenesis. p62 has been implicated in shuttling ubiquitinated and sometimes aggregated proteins for autophagic degradation. As an autophagy-specific substrate, p62 is degraded during the autophagic process, which makes intracellular level of p62 as a marker for autophagy flux. p62 is at the cross-roads of several signaling pathways including Ras/ Raf/ MAPK and NFkB and plays an important role in cancer. p62 is a component of inclusion bodies/ protein aggregates found in human diseases, including Huntington's disease, Alzheimer's disease, Parkinson's disease in the brain, and nephropathic cystinosis in kidney (PMID: 22074114, 22860231, 22714671). The molecular weight of p62 is predicted as 48/ 38 kDa, while western blot analyses using this antibody demonstrate the major band around 60-62 kDa in various tissues.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yushan Mao	36175702	Med Oncol	WB
Wenbin Pei	34650433	Front Pharmacol	WB
Lei Zhao	34582963	Food Chem Toxicol	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

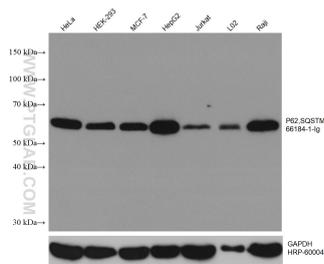
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

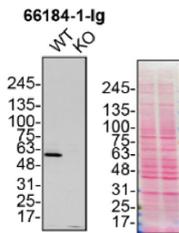
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

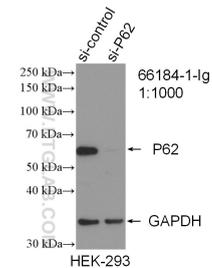
## Selected Validation Data



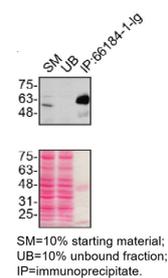
Various lysates were subjected to SDS PAGE followed by western blot with 66184-1-Ig (P62,SQSTM1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



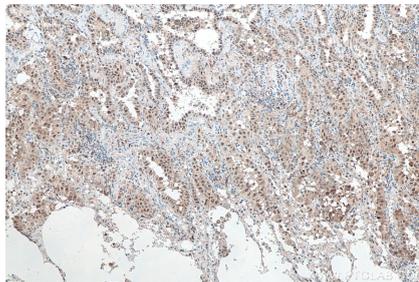
U2O (WT and SQSTM1 KO) lysates prepared with RIPA buffer, 25 µg protein loaded. 66184-1-Ig incubated at 1:1000 at 4°C overnight in 5% milk in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



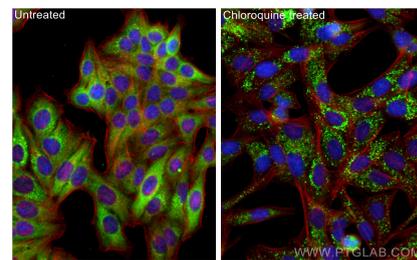
WB result of P62,SQSTM1 antibody (66184-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P62/SQSTM1 transfected HEK-293 cells.



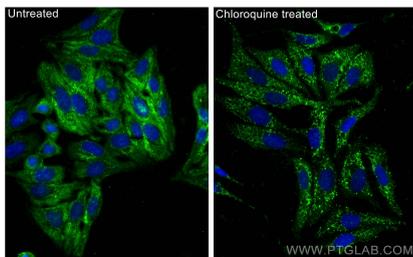
U2O lysates prepared and IP of SQSTM1 performed using 1.0 µg of 66184-1-Ig coupled to protein G- Sepharose beads. The Ponceau stained transfers of each blot are shown. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



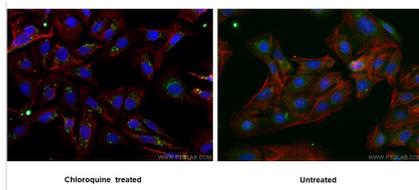
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66184-1-Ig (P62,SQSTM1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed Chloroquine treated HepG2 cells using P62,SQSTM1 antibody (66184-1-Ig, Clone: 1H5C1) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).



Immunofluorescent analysis of (-20°C Ethanol) fixed Chloroquine treated HepG2 cells using P62,SQSTM1 antibody (66184-1-Ig, Clone: 1H5C1) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunofluorescent analysis of (-20°C Ethanol) fixed U2O cells using P62/SQSTM1 antibody (66184-1-Ig, Clone: 1H5C1) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).