For Research Use Only

P62/SQSTM1 Polyclonal antibody

Catalog Number:18420-1-AP Featured Product 1829 Publications

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Basic Information

Catalog Number:
18420-1-AP

Concentration:
700 ug/ml

Source:
Rabbit

Isotype:
IgG

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:
Antigen affinity purification

Recommended Dilutions:
WB: 1:5000-1:50000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:200-1:800
IF/ICC: 1:750-1:3000
FC (Intra): 0.40 ug per 10^6 cells in a 100 µl suspension

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human

Cited Species:
human, rabbit, monkey, chicken, zebrafish, sheep, goat, goslings

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, HEK-293 cells, HepG2 cells, U-87 MG cells, Jurkat cells

IP : HepG2 cells, U2OS cells

IHC : human lung cancer tissue, human gliomas tissue, human liver cancer tissue

IF/ICC : Chloroquine treated HepG2 cells, U2OS cells, Chloroquine treated HeLa cells

FC (Intra) : HEK-293 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 aggregated proteins for autophagic degradation. p62 is degraded during the autophagic process, which makes its intracellular level a marker for autophagy progression. p62 is at the cross-roads of several signaling pathways including Ras/ Raf/ MAPK and NF κ B and plays 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, and nephropathic cystinosis (PMID: 22074114, 22860231, 22714671). The molecular weight of p62 is predicted to be 48/ 38 kDa (depending on the isoform), while western blot analyses using this antibody detects the bands around 45-48 kDa and 60-62 kDa, respectively.

Notable Publications

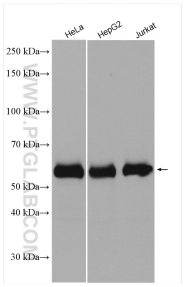
Author	Pubmed ID	Journal	Application
Huanshan He	36183753	Int J Biol Macromol	WB,IF
Xin Xu	36178722	Environ Toxicol	WB,IF
Zeen Zhu	36248959	Front Oncol	WB,IHC

Storage

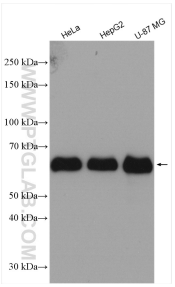
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

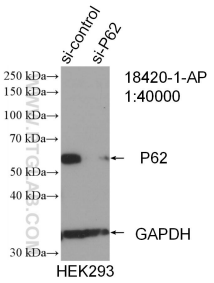
Selected Validation Data



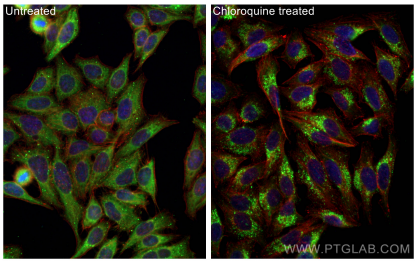
Various lysates were subjected to SDS PAGE followed by western blot with 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



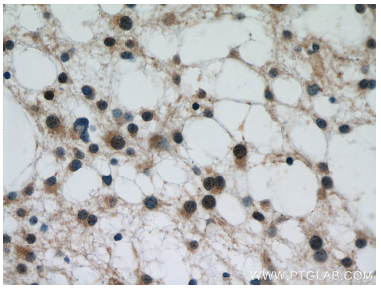
Various lysates were subjected to SDS PAGE followed by western blot with 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



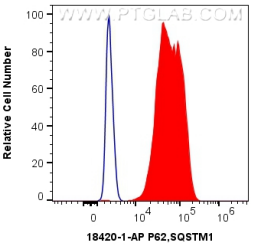
WB result of P62,SQSTM1 antibody (18420-1-AP; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P62/SQSTM1 transfected HEK-293 cells.



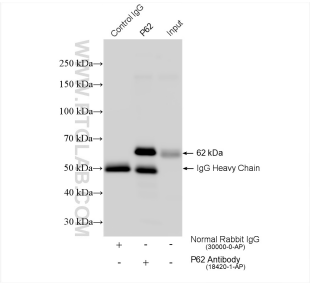
Immunofluorescent analysis of (-20°C Ethanol) fixed Chloroquine treated HepG2 cells using P62,SQSTM1 antibody (18420-1-AP) at dilution of 1:1500 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



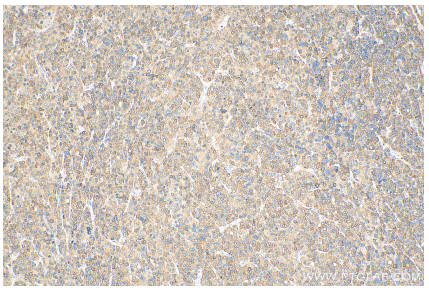
Immunohistochemical analysis of paraffin-embedded human gliomas using 18420-1-AP (SQSTM1 antibody) at dilution of 1:50 (under 40x lens).



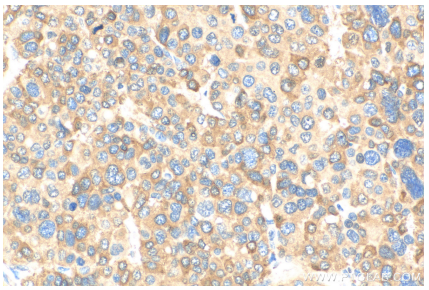
1X10^6 HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human P62,SQSTM1 (18420-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



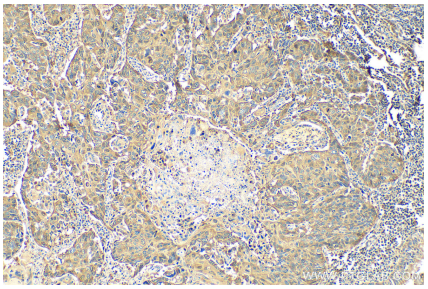
IP result of anti-P62,SQSTM1 (IP:18420-1-AP, 4ug; Detection:18420-1-AP 1:6000) with HepG2 cells lysate 1360 ug.

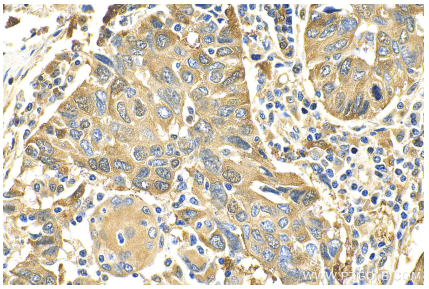


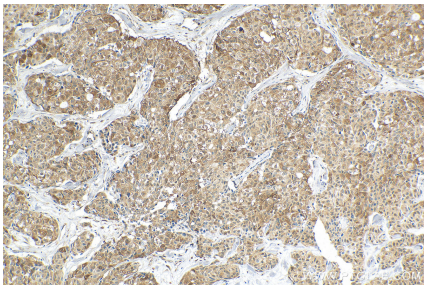
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



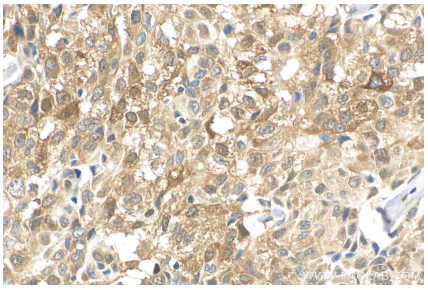




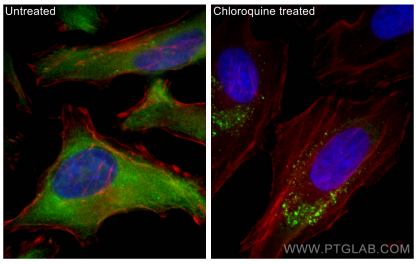
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18420-1-AP (P62,SQSTM1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed Chloroquine treated HeLa cells using P62,SQSTM1 antibody (18420-1-AP) at dilution of 1:500 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), (CL594-Phalloidin, red).