For Research Use Only

P62,SQSTM1 Monoclonal antibody, PBS Only

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Antibodies | ELISA kits | Proteins
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Catalog Number:66184-1-PBS Featured Product

Basic Information

Catalog Number:
66184-1-PBS

Size:
1 mg/ml

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

Applications

Tested Applications:
WB, IP, IF, IHC, Indirect ELISA

Species Specificity:
human

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 a 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 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 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.

Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

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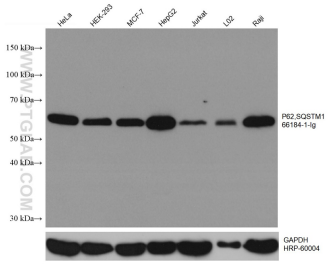
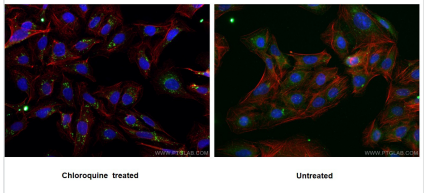
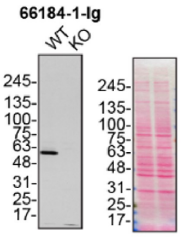
Selected Validation Data



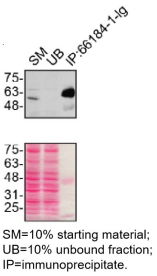
Various lysates were subjected to SDS PAGE followed by western blot with 66184-1-Ig (P62,SQSTM1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 66184-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS 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). This data was developed using the same antibody clone with 66184-1-PBS in a different storage buffer formulation.

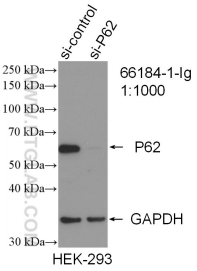


U2OS (WT and SQSTM1 KO) lysates prepared with RIPA buffer, 25 μg protein loaded. 66184-1-Ig incubated at 1:1000 at 4°C overnight in 5% milk in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency. This data was developed using the same antibody clone with 66184-1-PBS in a different storage buffer

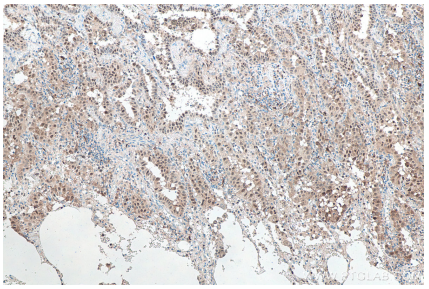


SM=10% starting material;
UB=10% unbound fraction;
IP=immunoprecipitate.

U2OS 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. This data was developed using the same antibody clone with 66184-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 66184-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66184-1-PBS in a different storage buffer formulation.