P62/SQSTM1
Monoclonal ANTIBODY

Catalog Number: 66184-1-Ig

**Basic Information**

- **Catalog Number:** 66184-1-Ig
- **Size:** 200 μg/150 μl
- **Source:** Mouse
- **Isotype:** IgG2a
- **Purification Method:** Protein A purification
- **Immunogen Catalog Number:** AG13131

**Recommended Dilutions:**
- WB: 1:1000-1:4000
- IHC: 1:50-1:500
- IF: 1:20-1:200

**Recommended Applications:**
- FC, IF, IHC, WB, ELISA

**Cited Applications:**
- IF, WB

**Species Specificity:**
- human

**Positive Controls:**
- WB: L02 cells, HEK-293 cells, HepG2 cells
- IHC: human liver cancer tissue
- IF: Starvation treated HepG2 cells

**Notable Publications**

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<th>Author</th>
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<tr>
<td>Ju Gao</td>
<td>26008306</td>
<td>Acta Biochim Biophys Sin (Shanghai)</td>
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<td>Yuko Kokubu</td>
<td>31250663</td>
<td>Stem Cells Transl Med</td>
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<td>Kai Wang</td>
<td>28622762</td>
<td>Biochem Biophys Res Commun</td>
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**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/MEK/ERK and NFκB and plays a 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, Alzheimer's disease, and nephropathic cystinosis in kidney (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**

- **Store at -20°C.** Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage.**

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

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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

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.

L02 cells were subjected to SDS PAGE followed by western blot with 66184-1- Ig P62/SQSTM1 antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66184-1-Ig P62/SQSTM1 antibody at dilution of 1:200 (under 10x lens), heat mediated antigen retrieved with Tris-EDTA buffer (pH9).

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66184-1-Ig P62/SQSTM1 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieved with Tris-EDTA buffer (pH9).

Immunofluorescent analysis of (-20°C Ethanol ) fixed Starvation treated HepG2 cells using 66184-1-Ig P62/SQSTM1 antibody at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).

1X10^6 Jurkat cells were stained with 0.20ug P62/SQSTM1 antibody (66184-1-Ig, red) and control antibody (blue). Fixed with 90% Methanol. Immunofluorescent analysis using 66184-1-Ig P62/SQSTM1 antibody at dilution of 1:100.