

## HA610448



|                            |                                                   |
|----------------------------|---------------------------------------------------|
| <b>Product Type:</b>       | Recombinant Chimeric Antibody, primary antibodies |
| <b>Species reactivity:</b> | Human, Mouse, Rat                                 |
| <b>Applications:</b>       | WB, IF-Cell, IHC-P, IF-Tissue, FC(Intra)          |
| <b>Molecular Wt:</b>       | Predicted band size: 52 kDa                       |
| <b>Clone number:</b>       | PSH08-11                                          |

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Description:</b> | Parkin is a 465-amino acid residue E3 ubiquitin ligase, a protein that in humans and mice is encoded by the PARK2 gene. Parkin plays a critical role in ubiquitination – the process whereby molecules are covalently labelled with ubiquitin (Ub) and directed towards degradation in proteasomes or lysosomes. Ubiquitination involves the sequential action of three enzymes. First, an E1 ubiquitin-activating enzyme binds to inactive Ub in eukaryotic cells via a thioester bond and mobilises it in an ATP-dependent process. Ub is then transferred to an E2 ubiquitin-conjugating enzyme before being conjugated to the target protein via an E3 ubiquitin ligase. There exists a multitude of E3 ligases, which differ in structure and substrate specificity to allow selective targeting of proteins to intracellular degradation. |
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|                   |                                                   |
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| <b>Immunogen:</b> | Recombinant protein within human Parkin aa 1-200. |
|-------------------|---------------------------------------------------|

|                          |                                                                                                                                                                                                                                                            |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Positive control:</b> | SH-SY5Y (Human neuroblastoma cell) cell lysate, COS-1 (African green monkey kidney fibroblast) cell lysate, PC-12 (Rat pheochromocytoma cell (undifferentiated)) cell lysate, Mouse brain tissue lysate, Rat brain tissue lysate, Pig brain tissue lysate. |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                              |                                                                                                                                            |
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| <b>Subcellular location:</b> | Mitochondrion, mitochondrion outer membrane, endoplasmic reticulum, cytosol, Nucleus, neuron projection, postsynaptic density, presynapse. |
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|                        |                                                     |
|------------------------|-----------------------------------------------------|
| <b>Database links:</b> | SwissProt: O60260 Human   Q9WVS6 Mouse   Q9JK66 Rat |
|------------------------|-----------------------------------------------------|

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|------------------------|--------------|
| <b>Storage Buffer:</b> | PBS (pH7.4). |
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|                             |                              |
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| <b>Storage Instruction:</b> | Store at 2-8℃. Avoid freeze. |
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| <b>Purity:</b> | Protein A affinity purified. |
|----------------|------------------------------|

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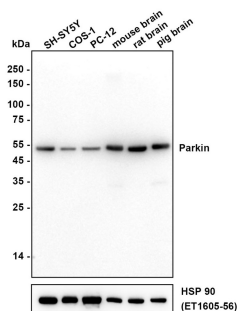
Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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## Images



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**Fig1:** This data was developed using HA601663, the same antibody clone in a different buffer formulation.

Western blot analysis of Parkin on different lysates with Guinea pig anti-Parkin antibody (HA601663) at 1/5,000 dilution.

Lane 1: SH-SY5Y (Human neuroblastoma cell) cell lysate

Lane 2: COS-1 (African green monkey kidney fibroblast) cell lysate

Lane 3: PC-12 (Rat pheochromocytoma cell (undifferentiated)) cell lysate

Lane 4: Mouse brain tissue lysate

Lane 5: Rat brain tissue lysate

Lane 6: Pig brain tissue lysate

Lysates/proteins at 10 µg/Lane.

Exposure time: 10 seconds; ECL: K1801

Blocking: 5% NFDM/TBST, 1 hour at room temperature

Primary antibody: HA601663, 1/5,000 in primary antibody dilution buffer (K1803), overnight at 4 °C

Secondary antibody: Goat anti-Guinea pig IgG-HRP (HA1021), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

Predicted band size: 52 kDa

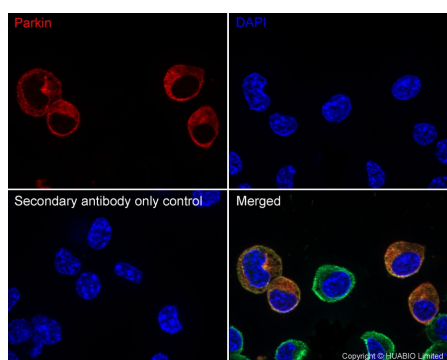
Observed band size: 52 kDa

**Fig2:** This data was developed using HA601663, the same antibody clone in a different buffer formulation.

Application: Immunocytochemistry (IF-cell)

Species: Mouse

Sample: Neuro-2a (Mouse brain neuroblastoma cell)



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Fixation: 4% Paraformaldehyde, 15 minutes at room temperature.

Permeabilization: 0.1% Triton X-100, 15 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 1 hour at room temperature.

Antibody dilution buffer: 1% BSA in PBST.

Primary antibody: HA601663, 1/100, overnight at 4°C.

Secondary antibody: Goat Anti-Guinea pig IgG (iFluor™ 594, HA1143), 45 hours at room temperature.

Counterstain: Beta tubulin (HA601187, Green), 1/100, overnight at 4°C. The nuclear counterstain was DAPI (Blue).

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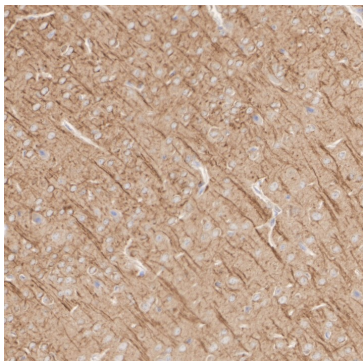
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation



**Fig3:** This data was developed using HA601663, the same antibody clone in a different buffer formulation.

Application: Immunohistochemistry (IHC-P)

Species: Mouse

Tissue: Cerebral cortex

Sample: Paraffin-embedded section

Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

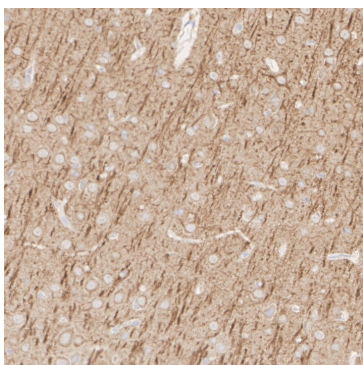
Wash buffer: 1× TBST

Endogenous peroxidase blocking: 3% H<sub>2</sub>O<sub>2</sub>, 10 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.

Primary antibody: HA601663, 1/2,000, 1 hour at room temperature.

Secondary antibody: HA1021, 30 minutes at room temperature.



**Fig4:** This data was developed using HA601663, the same antibody clone in a different buffer formulation.

Application: Immunohistochemistry (IHC-P)

Species: Rat

Tissue: Cerebral cortex

Sample: Paraffin-embedded section

Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

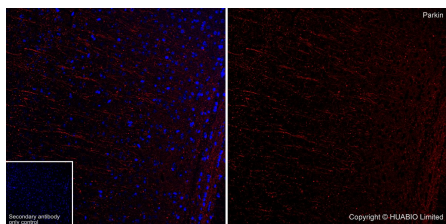
Wash buffer: 1× TBST

Endogenous peroxidase blocking: 3% H<sub>2</sub>O<sub>2</sub>, 10 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.

Primary antibody: HA601663, 1/2,000, 1 hour at room temperature.

Secondary antibody: HA1021, 30 minutes at room temperature.



**Fig5:** This data was developed using HA601663, the same antibody clone in a different buffer formulation.

Application: Immunofluorescence (IF-tissue)

Species: Mouse

Tissue: Cerebral cortex

Sample: Paraffin-embedded section

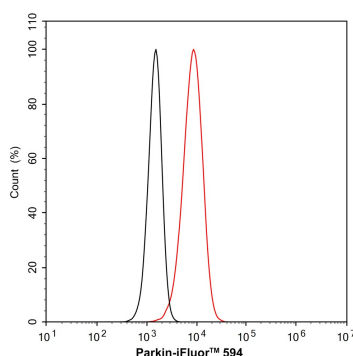
Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

Wash buffer: 1× TBST

Blocking: 10% normal goat serum + 1% Triton X-100 + 0.3 M Glycine in TBST, 30 minutes at room temperature.

Primary antibody: HA601663, 1/500, overnight at 4°C.

Secondary antibody: Goat Anti-Guinea pig IgG (iFluor™ 594, HA1143), 1.5 hours at room temperature.



**Fig6:** This data was developed using HA601663, the same antibody clone in a different buffer formulation.

Application: Flow Cytometry (Intra)

Species: Mouse

Sample: Neuro-2a (Mouse brain neuroblastoma cell)

Fixation: 4% Paraformaldehyde, 15 minutes at room temperature.

Permeabilization: 0.1% Tween-20, 15 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 15 minutes at room temperature.

Antibody dilution buffer: 1x PBS.

Primary antibody: HA601663 (1/1,000, Red), 15 minutes at room temperature.

Secondary antibody: Goat Anti-Guinea pig IgG (iFluor™ 594, HA1143), 15 hours at room temperature.

**Note:** All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

## Background References

1. Quinn PMJ et al. PINK1/PARKIN signalling in neurodegeneration and neuroinflammation. Acta Neuropathol Commun. 2020 Nov
2. Li J et al. PINK1/Parkin-mediated mitophagy in neurodegenerative diseases. Ageing Res Rev. 2023 Feb

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