

Anti-Alpha-Synuclein Antibody [PSH08-83] - BSA and Azide free

HA751248



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IHC-P, IHC-Fr, IF-Tissue
Molecular Wt:	Predicted band size: 14 kDa
Clone number:	PSH08-83

Description: Alpha-synuclein (aSyn) is a protein that, in humans, is encoded by the SNCA gene. Alpha-synuclein is a neuronal protein that regulates synaptic vesicle trafficking and subsequent neurotransmitter release. It is abundant in the brain, while smaller amounts are found in the heart, muscle and other tissues. In the brain, alpha-synuclein is found mainly in the axon terminals of presynaptic neurons. Within these terminals, alpha-synuclein interacts with phospholipids and proteins. Presynaptic terminals release chemical messengers, called neurotransmitters, from compartments known as synaptic vesicles. The release of neurotransmitters relays signals between neurons and is critical for normal brain function. In Parkinson's disease and other synucleinopathies, insoluble forms of alpha-synuclein accumulate as inclusions in Lewy bodies. Familial Parkinson's disease is associated with mutations in the -synuclein (SNCA) gene. In the process of seeded nucleation, alpha-synuclein acquires a cross-sheet structure similar to other amyloids.

Immunogen: Recombinant protein within human Alpha-Synuclein aa 1-140.

Positive control: Mouse cerebellum tissue, rat cerebellum tissue.

Subcellular location: Cytoplasm, Membrane, Nucleus, Synapse, Secreted, Cell projection, axon.

Database links: SwissProt: P37840 Human | O55042 Mouse | P37377 Rat

Recommended Dilutions:

WB	1:2,000-1:5,000
IHC-P	1:5,000
IHC-Fr	1:500
IF-Tissue	1:500-1:1,000

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

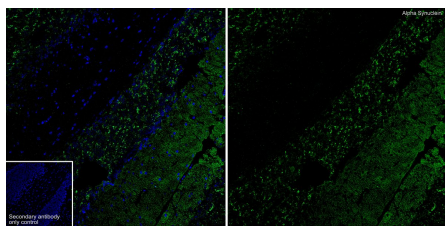
Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

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

Images

**Fig1:** Application: IHC-Fr

Species: Mouse

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1/500

Antigen retrieval: The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven.

Fig2: Application: IHC-Fr

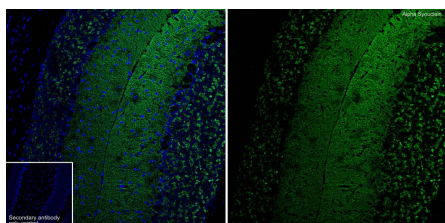
Species: Rat

Site: Cerebellum

Sample: Frozen section

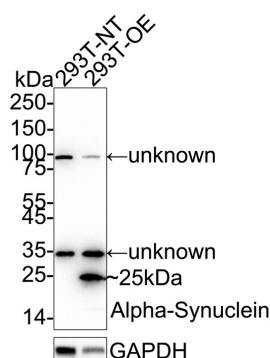
Antibody concentration: 1/500

Antigen retrieval: The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven.

**Fig3:** Western blot analysis of Alpha-Synuclein on different lysates with Rabbit anti-Alpha-Synuclein antibody (HA751248) at 1/2,000 dilution.

Lane 1: 293T transfected with empty control cell lysate

Lane 2: 293T transfected with Alpha-Synuclein cell lysate



Lysates/proteins at 15 µg/Lane.

Predicted band size: 14 kDa

Observed band size: 25 kDa

Exposure time: 3 minutes; ECL: K1801;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751248) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

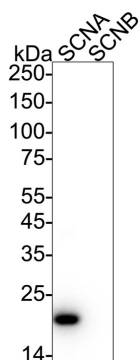


Fig4: Western blot analysis of Alpha-Synuclein on different lysates with Rabbit anti-Alpha-Synuclein antibody (HA751248) at 1/5,000 dilution.

Lane 1: Human SCNA recombinant protein, 30ng/Lane

Lane 2: Human SCNB recombinant protein, 30ng/Lane

Exposure time: 4 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751248) at 1/5,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

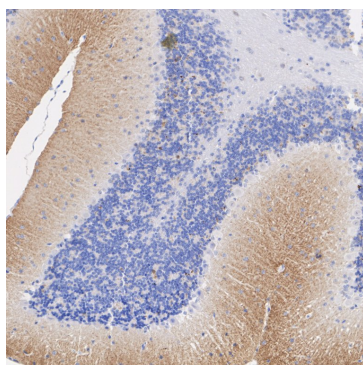


Fig5: Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rabbit anti-Alpha-Synuclein antibody (HA751248) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751248) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

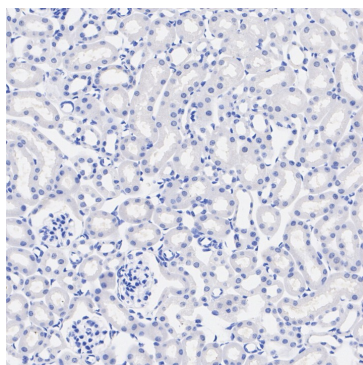


Fig6: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue (low expression) with Rabbit anti-Alpha-Synuclein antibody (HA751248) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751248) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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

Background References

1. Estaun-Panzano J et al. Monitoring alpha-synuclein aggregation. Neurobiol Dis. 2023 Jan
2. Prashberger R et al. Neuronal identity defines alpha-synuclein and tau toxicity. Neuron. 2023 May

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUAABIO
www.huabio.cn

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