

# Anti-Presenilin 2 / AD5 Antibody [PSH05-18] - BSA and Azide free

## HA750989



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat
<b>Applications:</b>	WB, IP
<b>Molecular Wt:</b>	Predicted band size: 50 kDa
<b>Clone number:</b>	PSH05-18

**Description:** Presenilin-2 is a protein that (in humans) is encoded by the PSEN2 gene. Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1; PSEN2) or the amyloid precursor protein (APP). These disease-linked mutations result in increased production of the longer form of amyloid-beta (main component of amyloid deposits found in AD brains). Presenilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves APP. Also, it is thought that the presenilins are involved in the cleavage of the Notch receptor, such that they either directly regulate gamma-secretase activity or themselves are protease enzymes. Two alternative transcripts of PSEN2 have been identified. In melanocytic cells PSEN2 gene expression may be regulated by MITF.

**Immunogen:** Synthetic peptide within Human Presenilin 2 aa 300-400.

**Positive control:** HeLa cell lysate, HepG2 cell lysate, A549 cell lysate, 293T cell lysate, SH-SY5Y cell lysate, RAW264.7 cell lysate, Neuro-2a cell lysate, C2C12 cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, C6 cell lysate, human brain tissue lysate, mouse brain tissue lysate, rat liver tissue lysate.

**Subcellular location:** Endoplasmic reticulum membrane, Golgi apparatus membrane.

**Database links:** SwissProt: P49810 Human | Q61144 Mouse | O88777 Rat

**Recommended Dilutions:**

<b>WB</b>	1:1,000
<b>IP</b>	1-2µg/sample

**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.

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Orders:0086-571-88062880

Technical:0086-571-89986345

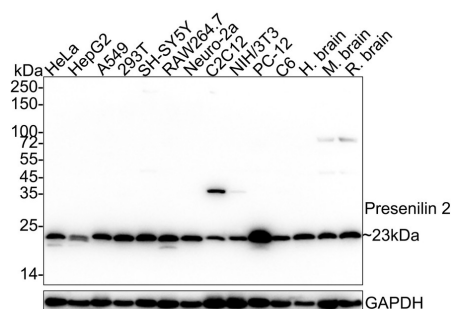
Service mail:support@huabio.cn

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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

## Images

**Fig1:** Western blot analysis of Presenilin 2 / AD5 on different lysates with Rabbit anti-Presenilin 2 / AD5 antibody (HA750989) at 1/1,000 dilution.



Lane 1: HeLa cell lysate (20 µg/Lane)  
 Lane 2: HepG2 cell lysate (20 µg/Lane)  
 Lane 3: A549 cell lysate (20 µg/Lane)  
 Lane 4: 293T cell lysate (20 µg/Lane)  
 Lane 5: SH-SY5Y cell lysate (20 µg/Lane)  
 Lane 6: RAW264.7 cell lysate (20 µg/Lane)  
 Lane 7: Neuro-2a cell lysate (20 µg/Lane)  
 Lane 8: C2C12 cell lysate (20 µg/Lane)  
 Lane 9: NIH/3T3 cell lysate (20 µg/Lane)  
 Lane 10: PC-12 cell lysate (20 µg/Lane)  
 Lane 11: C6 cell lysate (20 µg/Lane)  
 Lane 12: Human brain tissue lysate (40 µg/Lane)  
 Lane 13: Mouse brain tissue lysate (40 µg/Lane)  
 Lane 14: Rat liver tissue lysate (40 µg/Lane)

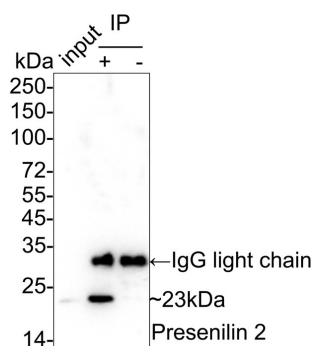
Predicted band size: 50 kDa

Observed band size: 23 kDa

Exposure time: 1 minute; 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 (HA750989) at 1/1,000 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.



**Fig2:** Presenilin 2 / AD5 was immunoprecipitated from 0.2 mg HeLa cell lysate with HA750989 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA750989 at 1/1,000 dilution. Anti-Rabbit IgG for IP Nano-secondary antibody (NBI01H) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)  
 Lane 2: HA750989 IP in HeLa cell lysate  
 Lane 3: Rabbit IgG instead of HA750989 in HeLa cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST

Exposure time: 59 seconds; ECL: K1801

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

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### Background References

1. Barazzuol L et al. Unraveling Presenilin 2 Functions in a Knockout Zebrafish Line to Shed Light into Alzheimer's Disease Pathogenesis. Cells. 2023 Jan
2. Nam H et al. Presenilin 2 N141I mutation induces hyperactive immune response through the epigenetic repression of REV-ERBalpha. Nat Commun. 2022 Apr

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