

# Anti-Presenilin 1 / PS-1 Antibody [PSH11-19] - BSA and Azide free

## HA751400



|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <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: 53 kDa                           |
| <b>Clone number:</b>       | PSH11-19                                              |

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description:</b>           | Presenilin-1 (PS-1) is a presenilin protein that in humans is encoded by the PSEN1 gene. Presenilin-1 is one of the four core proteins in the gamma secretase complex, which is considered to play an important role in generation of amyloid beta (A $\beta$ ) from amyloid-beta precursor protein (APP). Accumulation of amyloid beta is associated with the onset of Alzheimer's disease. 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. Multiple alternatively spliced transcript variants have been identified for this gene, the full-length natures of only some have been determined. |
| <b>Immunogen:</b>             | Synthetic peptide within human Presenilin 1 aa 311-360.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Positive control:</b>      | HeLa cell lysate, HEK-293 cell lysate, MEF cell lysate, HepG2 cell lysate, HL-60 cell lysate, Daudi cell lysate, Neuro-2a cell lysate, Mouse brain tissue lysate, Mouse cerebellum tissue lysate, Rat brain tissue lysate, Rat cerebellum tissue lysate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Subcellular location:</b>  | Endoplasmic reticulum, Endoplasmic reticulum membrane, Golgi apparatus membrane, Cytoplasmic granule, Cell membrane, Cell projection, growth cone, Early endosome, Early endosome membrane, neuron projection, axon, Synapse.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Database links:</b>        | SwissProt: P49768 Human   P49769 Mouse   P97887 Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Recommended Dilutions:</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| WB                            | 1:2,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| IP                            | 1-2 $\mu$ g/sample                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage Buffer:</b>        | PBS (pH7.4).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Instruction:</b>   | Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity:</b>                | Protein A affinity purified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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Orders:0086-571-88062880

Technical:0086-571-89986345

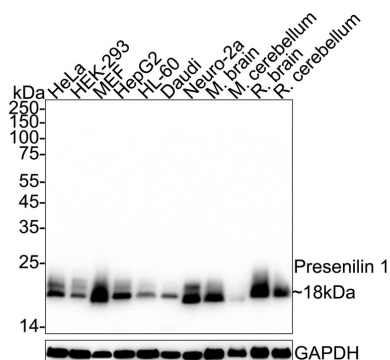
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

## Images

**Fig1:** Western blot analysis of Presenilin 1 / PS-1 on different lysates with Rabbit anti-Presenilin 1 / PS-1 antibody (HA751400) at 1/2,000 dilution.



Lane 1: HeLa cell lysate (20 µg/Lane)  
 Lane 2: HEK-293 cell lysate (20 µg/Lane)  
 Lane 3: MEF cell lysate (20 µg/Lane)  
 Lane 4: HepG2 cell lysate (20 µg/Lane)  
 Lane 5: HL-60 cell lysate (20 µg/Lane)  
 Lane 6: Daudi cell lysate (20 µg/Lane)  
 Lane 7: Neuro-2a cell lysate (20 µg/Lane)  
 Lane 8: Mouse brain tissue lysate (40 µg/Lane)  
 Lane 9: Mouse cerebellum tissue lysate (40 µg/Lane)  
 Lane 10: Rat brain tissue lysate (40 µg/Lane)  
 Lane 11: Rat cerebellum tissue lysate (40 µg/Lane)

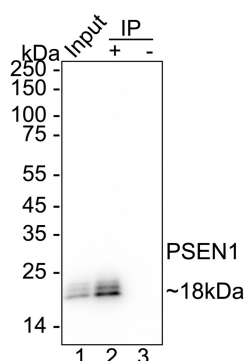
Predicted band size: 53 kDa

Observed band size: 18 kDa

Exposure time: 25 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 (HA751400) 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.



**Fig2:** Presenilin 1 / PS-1 was immunoprecipitated from 0.2 mg HeLa cell lysate with HA751400 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA751400 at 1/1,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)  
 Lane 2: HA751400 IP in HeLa cell lysate  
 Lane 3: Rabbit IgG instead of HA751400 in HeLa cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST

Exposure time: 10 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. Yang Y et al. Presenilin-1 (PSEN1) Mutations: Clinical Phenotypes beyond Alzheimer's Disease. Int J Mol Sci. 2023 May
2. Gamez-Belmonte R et al. Epithelial presenilin-1 drives colorectal tumour growth by controlling EGFR-COX2 signalling. Gut. 2023 Jun

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