Anti-beta Amyloid 1-42 Antibody [PSH02-83]

HA721789

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IHC-P, IF-Tissue
Molecular Wt:	Predicted band size: 4 kDa
Clone number:	PSH02-83

Description: This gene encodes a cell surface receptor and transmembrane precursor protein that is cleaved by secretases to form a number of peptides. Some of these peptides are secreted and can bind to the acetyltransferase complex APBB1/TIP60 to promote transcriptional activation, while others form the protein basis of the amyloid plaques found in the brains of patients with Alzheimer disease. In addition, two of the peptides are antimicrobial peptides, having been shown to have bacteriocidal and antifungal activities. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebroarterial amyloidosis (cerebral amyloid angiopathy). Multiple transcript variants encoding several different isoforms have been found for this gene.

Immunogen: Synthetic peptide within Human beta Amyloid 1-42 peptide.

Positive control: APP/PS1, 6-month mouse of AD brain tissue.

Subcellular location: Cell membrane, Membrane, Perikaryon, Cell projection, growth cone, Membrane, clathrin-coated pit, Early endosome, Cytoplasmic vesicle.

Database links: SwissProt: P05067 Human | P12023 Mouse

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000
IF-Tissue	1:50

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Protein A affinity purified.

Images

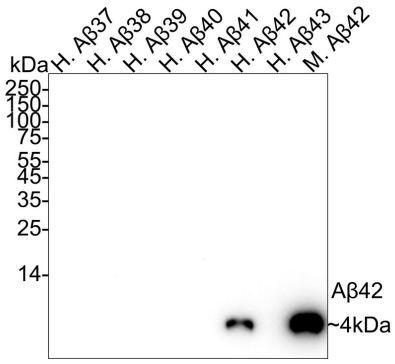

Fig1: Western blot analysis of beta Amyloid 1-42 on different peptides with Rabbit anti-beta Amyloid 1-42 antibody (HA721789) at 1/1,000 dilution.

Lane 1: Human Aβ37 full length peptide (negative)
Lane 2: Human Aβ38 full length peptide (negative)
Lane 3: Human Aβ39 full length peptide (negative)
Lane 4: Human Aβ40 full length peptide (negative)
Lane 5: Human Aβ41 full length peptide (negative)
Lane 6: Human Aβ42 full length peptide (positive)
Lane 7: Human Aβ43 full length peptide (negative)
Lane 8: Mouse Aβ42 full length peptide (positive)

Lysates/proteins at 100 ng/Lane.

Predicted band size: 4 kDa
Observed band size: 4 kDa

Exposure time: 59 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 (HA721789) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

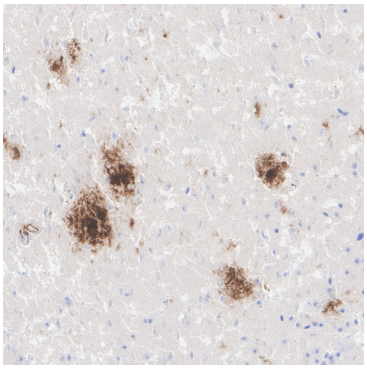

Fig2: Immunohistochemical analysis of paraffin-embedded APP/PS1, 6-month mouse of AD brain tissue with Rabbit anti-beta Amyloid 1-42 antibody (HA721789) at 1/1,000 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (HA721789) at 1/1,000 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.

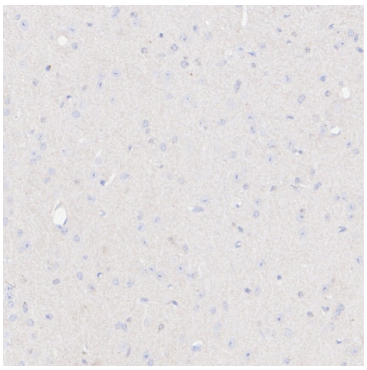

Fig3: Immunohistochemical analysis of paraffin-embedded mouse brain tissue (negative control) with Rabbit anti-beta Amyloid 1-42 antibody (HA721789) at 1/1,000 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (HA721789) at 1/1,000 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.

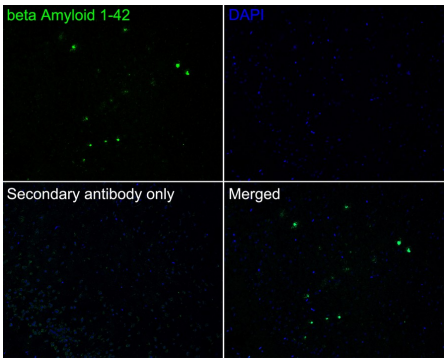

Fig4: Immunofluorescence analysis of paraffin-embedded APP/PS1, 6-month mouse of AD brain tissue labeling beta Amyloid 1-42 with Rabbit anti-beta Amyloid 1-42 antibody (HA721789) at 1/50 dilution.

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 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA721789, green) at 1/50 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

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

Background References

1. Janelidze S et al. Head-to-Head Comparison of 8 Plasma Amyloid-β 42/40 Assays in Alzheimer Disease. JAMA Neurol. 2021 Nov