Anti-beta Amyloid 1-42 Antibody [PSH03-99] - BSA and Azide free (Detector)

HA722080

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Det)
Molecular Wt:	Predicted band size: 4 kDa
Clone number:	PSH03-99

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. This antibody does not cross-react with Mouse beta Amyloid 1-42.

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

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

Database links: SwissProt: P05067 Human

Recommended Dilutions:

ELISA(Det) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH02-83] to Human beta Amyloid 1-42 (Capture) (HA722079). The reference range value is 24.7-2000pg/ml.

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.

Images

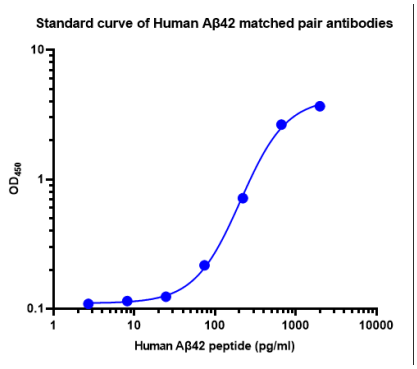

Fig1: Sandwich ELISA analysis of Human Aβ42 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody HA722079 diluted in carbonate/bicarbonate buffer, at a concentration of 5 µg/ml overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted human Aβ42 protein starting from 2000 pg/ml to 0 pg/ml and detect antibody HA722080-Biotin (0.2 µg/ml) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30℃ with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

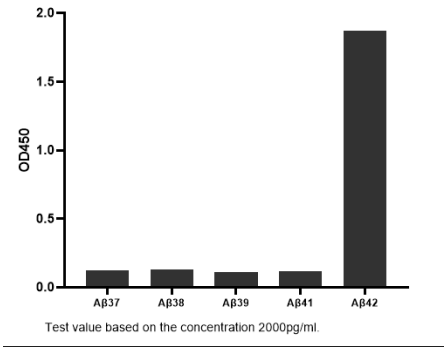

Fig2: Sandwich ELISA analysis of mouse Aβ37, Aβ38, Aβ39, Aβ41, Aβ42 matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA722079) diluted in carbonate/bicarbonate buffer, at a concentration of 5 µg/ml overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1%BSA blocking buffer, and incubated with serial diluted mouse Aβ37, Aβ38, Aβ39, Aβ41, Aβ42 protein starting with 2000 pg/ml and detect antibody (HA722080, Biotin, 0.2 µg/ml) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30℃ with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

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