Anti-Tau Antibody [PSH10-42] - BSA and Azide free (Detector)

HA723209

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	ELISA(Det)
Clone number:	PSH10-42

Description: Tau, also known as MAPT (microtubule-associated protein tau), MAPTL, MTBT1 or TAU, is a 758 amino acid protein that localizes to the cytoplasm, as well as to the cytoskeleton and the cell membrane, and contains four Tau/MAP repeats. Expressed in neuronal tissue and existing as multiple alternatively spliced isoforms, Tau functions to promote microtubule assembly and stability and is thought to be involved in the maintenance of neuronal polarity. Tau may also link microtubules with neural plasma membrane components and, addition to its role in microtubule stability, is also necessary for cytoskeletal plasticity. Tau is highly subject to a variety of post-translational modifications, including phosphorylation on serine and threonine residues, polyubiquitination (and subsequent proteasomal degradation) and glycation of specific Tau isoforms. Defects in the gene encoding Tau are associated with Alzheimers disease, pallido-ponto-nigral degeneration (PPND), corticobasal degeneration (CBD) and progressive supranuclear palsy (PSP).

Immunogen:	Synthetic peptide within human Tau aa 57-68.
Subcellular location:	c
Database links:	SwissProt: P10636-8 Human | P10637 Mouse

Recommended Dilutions:

ELISA(Det)	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH16-41] to Human Phospho-Tau (T217) antibody (Capture) (HA723841) and Recombinant Human Phospho-Tau (T217) protein (HA211033) as the standard. The reference range value is 0.195-50 ng/mL.
ELISA(Det)	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH16-43] to Human Non-Phoshpho-Tau (T217) antibody (Capture) (HA723843) and Recombinant Human Phospho-Tau (T217) protein (HA210937) as the standard. The reference range value is 0.117-30 pg/mL.
ELISA(Det)	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH16-46] to Brain-derived tau/BD-tau antibody (Capture) (HA723847) and Recombinant Human Tau/Tau441 protein (HA210937) as the standard. The reference range value is 39-10,000 pg/mL.
ELISA(Det)	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH16-48] to Tau antibody (Capture) (HA723850) and Recombinant Human Tau/Tau441 protein (HA210937) as the standard. The reference range value is 39-5,000 pg/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

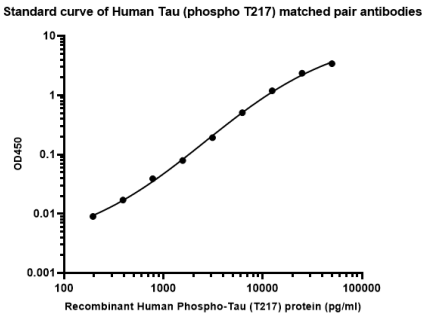

Fig1: Sandwich ELISA analysis of Human Tau (phospho T217) matched pair antibodies

Capture: HA723841, Phospho-Tau (T217) Rabbit mAb [PSH16-41]
Detector: HA723209, Phospho-Tau (T217) Rabbit mAb [PSH10-42]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723841) diluted in carbonate/bicarbonate buffer, at a concentration of 5ug/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 Recombinant Human Phospho-Tau (T217) protein (HA211033) starting from 50000 pg/ml to 0 pg/ml and detect antibody (HA723209, 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.

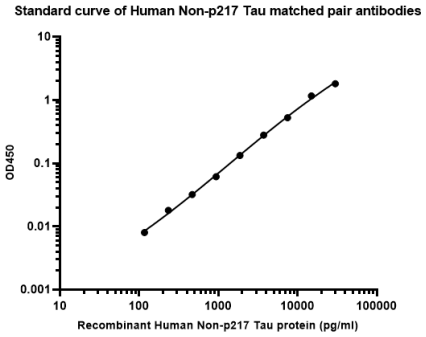

Fig2: Sandwich ELISA analysis of Human Non-p217 Tau matched pair antibodies

Capture: HA723843, Phospho-Tau (T217) Rabbit mAb [PSH16-43]
Detector: HA723209, Phospho-Tau (T217) Rabbit mAb [PSH10-42]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723843) diluted in carbonate/bicarbonate buffer, at a concentration of 5ug/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 Recombinant Human Phospho-Tau (T217) protein (HA210937) starting from 30000 pg/ml to 0 pg/ml and detect antibody (HA723209, 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.

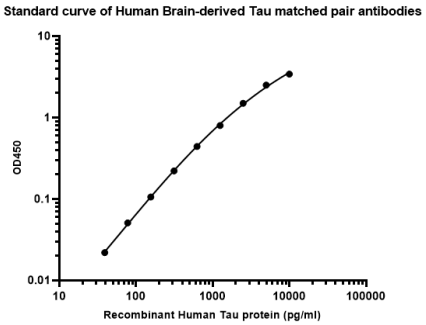

Fig3: Sandwich ELISA analysis of Human Brain-derived tau/BD-tau matched pair antibodies

Capture: HA723847, Brain-derived tau/BD-tau Rabbit mAb [PSH16-46]
Detector: HA723209, Brain-derived tau/BD-tau Rabbit mAb [PSH10-42]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723847) diluted in carbonate/bicarbonate buffer, at a concentration of 5ug/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 Recombinant Brain-derived tau/BD-tau protein (HA210937) starting from 10000 pg/ml to 0 pg/ml and detect antibody (HA723209, 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.

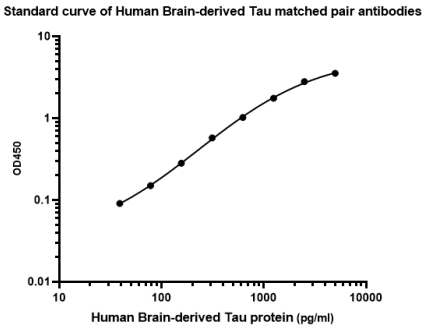

Fig4: Sandwich ELISA analysis of human Tau matched pair antibodies

Capture: HA723850, Tau Rabbit mAb [PSH16-48]
Detector: HA723209, Tau Rabbit mAb [PSH10-42]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723850) diluted in carbonate/bicarbonate buffer, at a concentration of 5ug/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 Recombinant Human Tau protein (HA210937) starting from 10000 pg/ml to 0 pg/ml and detect antibody (HA723209, 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.

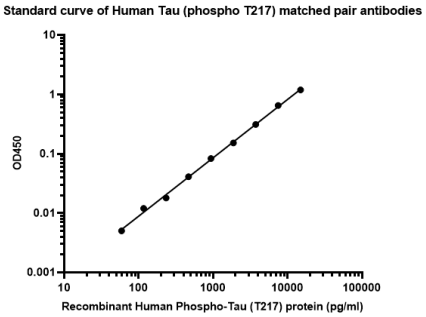

Fig5: Sandwich ELISA analysis of Human Tau (phospho T217) matched pair antibodies

Capture: HA723877, Phospho-Tau (T217) Rabbit mAb [PSH16-75]
Detector: HA723209, Phospho-Tau (T217) Rabbit mAb [PSH10-42]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723877) diluted in carbonate/bicarbonate buffer, at a concentration of 5ug/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 Recombinant Human Phospho-Tau (T217) protein (HA211033) starting from 15000 pg/ml to 0 pg/ml and detect antibody (HA723209, 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. Wang, HY. et al. 2012. Reducing amyloid-related Alzheimer's disease pathogenesis by a small molecule targeting filamin A. J. Neurosci. 32: 9773-9784.
2. Kamnaksh, A. et al. 2012. Neurobehavioral, cellular, and molecular consequences of single and multiple mild blast exposure. Electrophoresis. 33: 3680-3692.