Background:
AβpE3 (N-terminally truncated Aβ starting with pyroglutamate) represents a dominant fraction of Aβ peptides in senile plaques of AD brains. AβpE3 has higher aggregation propensity and shows increased toxicity compared to full-length Aβ. Intraneuronal accumulation of AβpE3 peptides induces severe neuron loss and an associated neurological phenotype. In APP/PS1KI mice, a continuous increase in AβpE3 plaque load with increasing age has been reported. It has been suggested that the peptides starting with position 1 of Aβ are N-truncated as disease progresses and that AβpE3 positive plaques are resistant to degradation likely due to their high stability and propensity to aggregate (1-5).

Description: Mouse monoclonal antibody

Immunogen: (3-8) N-terminal pyroglutamated synthetic amyloid beta peptide conjugated with a carrier protein.

Host: Mouse
Clone: 2G6
IsoType: IgG1
Size: 100 μL, 2.5 mg/mL
Form: Ascites

Confirmed Species Reactivity: Human, Mouse. Based on amino acid sequence homology, reactivity with most vertebrates including dog, pig, and chicken is expected.

Usage: IHC, ELISA, Western blotting.

Immunohistochemistry: Tissue sections: (alcohol-fixed, paraffin embedded, frozen). Recommended antibody dilution - 1:100 -1:500. Tissue pretreatment with citrate buffer pH 6.0 (microwave boiling for 1-2 min), followed by a 3 minute incubation with 88% formic acid at RT.

Western blotting: 1:1000-1:2000

ELISA: 1 : 2000 – 1 : 4000
Optimal dilutions for specific application should be determined by investigator. Appropriate concentration will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature, length of incubation, etc.

Storage: Aliquot and store at -20°C or below. Avoid repeated freeze-thaw cycles to prevent denaturation. Do not store in frost-free freezers.

Stability: Minimum 6 months (at -20°C) from reception date.

Intended Use: Research Use Only.

References: