β-Amyloid Antibody (1-40), pAb, Rabbit

Cat. No.: A00688-40

Size: 40 μg

Synonyms: Rabbit Anti β-Amyloid (1 -40) pAb; Aβ 1-40

Description:

A number of mutations, identified in the gene encoding the β-amyloid precursor protein (βAPP), have been linked to early-onset Familial Alzheimers Disease. βAPP is cleaved sequentially by the proteolytic enzymes β-secretase and γ-secretase to produce β-amyloid (Aβ) peptides with the Aβ1-42(43) and the Aβ1-40 forms being the most prevalent. Secreted Aβ peptides can bind to scavenger receptors and the receptor for advanced glycation endproducts. Aβ peptides are degraded either via a reuptake mechanism followed by endosomal degradation or by an extracellular insulin-degrading enzyme. Extracellular accumulation of Aβ leads to formation of aggregates, fibrils, and eventually amyloid deposits called neuritic plaques, a hallmark of Alzheimer's disease. β-amyloid antibodies and peptides have been developed as tools for elucidating the biology of Alzheimers disease.

The rabbit anti-β-amyloid 1-40 antibody is developed in rabbit using a synthetic peptide corresponding to amino acids 1-40 of β-amyloid conjugated to KLH.

This polyclonal antibody is highly purified from rabbit antiserum by immunoaffinity chromatography and is supplied as a 100 μl aliquot at a concentration of 1 mg/ml in PBS, pH7.4, containing 0.02% sodium azide.

Immunogen: A synthetic peptide corresponding to amino acids 1-40 of β-amyloid conjugated to KLH

Host: Rabbit

Antigen Synonyms: Human

Conjugation: Unconjugated

Formulation:

1 mg/ml in PBS, pH 7.4, containing 0.02% sodium azide

Ig Subclass: Rabbit IgG

Specificity: This antibody is specific to human β-amyloid 1-40. Weak cross-reactivity is observed with human β-amyloid 1-42.

Purification: Immunoaffinity chromatography

Applications:

The investigator must determine the ideal working concentration for each specific application. We have not yet determined the suitability of this antibody for applications other than those listed below. The ideal working concentration must take into account such factors as secondary antibody affinity, antigen concentration, sensitivity of the detection method, temperature, and the length of the incubations. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.05-0.5 μg/ml

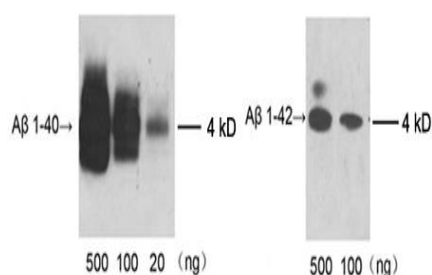**Western blot:** 0.1-1.0 μg/ml

Immunofluorescence: 5-20 μg/ml

Other applications: user-optimized
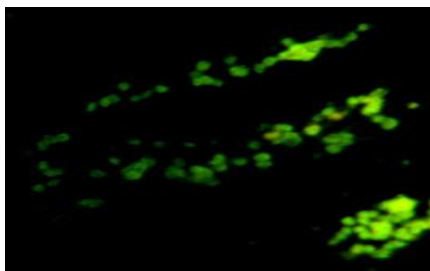
Species Reactivity: Human

Storage:

The antibody is stable for 2-3 weeks if stored at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example

Western blot analysis of human β-Amyloid (1-40) and β-Amyloid (1-42) peptides using
Rabbit Anti-β-Amyloid (1-40) Polyclonal Antibody (GenScript, A00688)

Immunofluorescent analysis of human Alzheimer disease's brain hippocampus tissue slide (Biochain, T2236052Alz) using Rabbit Anti-β-Amyloid (1-40) Polyclonal Antibody (GenScript, A00688)