Aβ [1-42] ABfinity™ Recombinant Rabbit Monoclonal Antibody - Purified

REF Catalog no. 700254

(See product label for lot information)

Clone/PAD: H31L21
Isotype: IgG
Gene ID: 351
Protein Acc. no.: P05067
Qty: 100 μg
Volume: 200 μl
Concentration: 0.5 mg/ml

Formulation
PBS + 0.09% sodium azide.

Immunogen
A peptide corresponding to amino acids 707-713 of P05067.

Immunogen sequence
VGGVVIA

Reactivity
This antibody reacts with human and mouse Abeta [1-42]. Based on sequence identity and similarity, reactivity to rat, primate, canine, bovine, equine, swine, hamster, and numerous other species is expected.

Specificity
Cross reactivity to Aβ [1-40] is not observed in sandwich ELISA. In addition, in antigen ELISA cross reactivity is not observed with Aβ [1-37], Aβ [1-38], Aβ [1-40], or Aβ [1-43] when used at low antibody concentrations (up to 30 ng/ml).

Storage
2-8°C for up to 1 mo, -20°C for long term storage. Avoid repeated freezing and thawing.

Expiration Date
Expires one year from date of receipt when stored as instructed.

Validated Applications:

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<th>Immunohistochemistry</th>
<th>Species</th>
<th>Test Material</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Sandwich ELISA</td>
<td>detector</td>
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<td>0.1-0.2 µg/ml</td>
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Background
Alzheimer’s Disease (AD) is characterized by the presence of extracellular plaques and intracellular neurofibrillary tangles (NFTs) in the brain (1,2). The major component of these plaques is Aβ peptide (β-amyloid), a 40 to 43 amino acid peptide cleaved from amyloid precursor protein (APP) by β-secretase (e.g., BACE) and a putative γ secretase (3-5). Increased release of the ‘longer forms’ of Aβ peptide, Aβ42 or Aβ43, which have a greater tendency to aggregate than Aβ40, occurs in individuals expressing certain genetic mutations, expressing certain ApoE alleles, or may involve other, still undiscovered, factors (4-6). Many researchers theorize that this increased release of Aβ42/Aβ43 leads to the abnormal deposition of Aβ and the associated neurotoxicity in the brains of affected individuals (7,8).

References
Immunohistochemistry of human brain and transgenic mouse tissue labeled with rabbit anti-Aβ [1-42] (Cat. No. 700254).

FFPE human Alzheimer's brain (left) and transgenic mice that express FAD mutant APP and PS1 (right) were labeled with rabbit anti-Aβ [1-42] (1 µg/ml). Human tissues were detected with SuperPicTure™ Polymer DAB (Cat. No.87-8963). Mouse image was provided by Dr. Robert Vassar and prepared according to (9). Images were taken at 20x (left) or 10x (right) magnification. Note strong cytoplasmic staining in amyloid plaque.