

Abeta 40

Cat.No. 218 203; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (see remarks) IP: not tested yet ICC: not tested yet IHC: 1 : 200 up to 1 : 500 (see remarks) IHC-P/FFPE: 1 : 100 up to 1 : 500 (see remarks) ELISA: yes (see remarks)
Immunogen	Synthetic peptide corresponding to AA 33 to 40 from human Abeta40 (UniProt Id: P05067)
Reactivity	Reacts with: human (P05067), rat (P08592), mouse (P12023). Other species not tested yet.
Specificity	Specific for Abeta 40, no cross reactivity to Abeta 38 and 42.
Remarks	WB: Detects purified Abeta 40. Complex samples like brain extracts still have to be tested. Boil membrane after blotting for 3min. IHC: Formic acid treatment required recommended protocol. IHC-P: Formic acid treatment required. ELISA: suitable as capture and detector antibody for sandwich-ELISA (protocol for sandwich-ELISA).

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Amyloid deposits, also called plaques, of Alzheimer's patients consist of several protein components like the amyloid **beta**-peptides (**Abeta**, **Aβ**) 1-40/42/43 and additional C- and N-terminally modified fragments of Abeta as for instance Abeta pE3 and Abeta pE11.

An additional Abeta variant, **Abeta 38**, is more soluble compared to other Abeta species and is not found in plaques of sporadic Alzheimer's cases. However, it is detected in the blood-vessel walls of a subset of patients with severe cerebral amyloid angiopathy. It especially accumulates in brains of patients carrying mutations in the Abeta coding region.

Cleavage of amyloid precursor protein APP by β- and γ- secretases results in the generation of the Aβ (βA4) peptide, whereas α-secretase cleaves within the Aβ sequence and prevents the formation of Abeta from APP.

Selected References SYSY Antibodies

Axonal degeneration in an Alzheimer mouse model is PS1 gene dose dependent and linked to intraneuronal Aβ accumulation. Christensen DZ, Huettenrauch M, Mitkovski M, Pradier L, Wirths O. *Frontiers in aging neuroscience* (2014) 6: 139. **IHC**

Selected General References

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