

Abeta 38

Cat.No. 218 421; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 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 : 500 (see remarks) IHC-P/FFPE: 1 : 200 (see remarks)
Clone	326F12
Subtype	IgG2b (κ light chain)
Immunogen	Synthetic peptide corresponding to AA 33 to 38 from human Abeta38 (UniProt Id: P05067)
Epitop	Epitop: AA 33 to 38 from human Abeta38 (UniProt Id: P05067)
Reactivity	Reacts with: human. Other species not tested yet.
Specificity	Specific for Abeta 38
Remarks	WB: Detects specifically 20 ng of purified Abeta 38. 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.

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

Deposition of C-terminally truncated Aβ species Aβ37 and Aβ39 in Alzheimer's disease and transgenic mouse models. Reinert J, Richard BC, Klafki HW, Friedrich B, Bayer TA, Wiltfang J, Kovacs GG, Ingelsson M, Lannfelt L, Paetau A, Bergquist J, et al. Acta neuropathologica communications (2016) 4: 24. **IHC-P**

Selected General References

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Dietary Cu stabilizes brain superoxide dismutase 1 activity and reduces amyloid Abeta production in APP23 transgenic mice. Bayer TA, Schäfer S, Simons A, Kemmling A, Kamer T, Tepest R, Eckert A, Schüssel K, Eikenberg O, Sturchler-Pierrat C, Abramowski D, et al. Proceedings of the National Academy of Sciences of the United States of America (2003) 100(24): 14187-92.

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