

## Abeta 38

Rudolf-Wissell-Str. 28 37079 Göttingen, Germany

Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

Cat.No. 218 411; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

## **Data Sheet**

Describilities /	100 us a unified ISC broadilised Asida use added before broadilisation Tax
Storage	100 $\mu g$ purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 $\mu$ l H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
	WB: 1: 1000 (see remarks) IP: not tested yet ICC: not tested yet IHC: 1: 500 (see remarks) IHC-P/FFPE: 1: 250 (see remarks) ELISA: yes, suitable as detector and capture antibody.
Clone	67B8
Subtype	lgG2a
_	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)
_	Reacts with: human (P05067). Other species not tested yet.
Specificity	Specific for Abeta 38
	<b>WB</b> : Detects specifically 1 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 **a**myloid **beta**-peptides (**Abeta**, **A\beta**) 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 **a**myloid **p**recursor **p**rotein APP by  $\beta$ - and  $\gamma$ - secretases results in the generation of the A $\beta$  ( $\beta$ A4)peptide, whereas  $\alpha$ -secretase cleaves within the A $\beta$ 

sequence and prevents the formation of Abeta from APP.

## **Selected General References**

Circulating immune complexes of Abeta and IgM in plasma of patients with Alzheimer's disease. Marcello A, Wirths O, Schneider-Axmann T, Degerman-Gunnarsson M, Lannfelt L, Bayer TA Journal of neural transmission (Vienna, Austria: 1996) (2009) 116(7): 913-20.

Immune response to Abeta-peptides in peripheral blood from patients with Alzheimer's disease and control subjects. Baril L, Nicolas L, Croisile B, Crozier P, Hessler C, Sassolas A, McCormick JB, Trannoy E
Neuroscience letters (2004) 355(3): 226-30.

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.

Correlative memory deficits, Abeta elevation, and amyloid plaques in transgenic mice. Hsiao K, Chapman P, Nilsen S, Eckman C, Harigaya Y, Younkin S, Yang F, Cole G Science (New York, N.Y.) (1996) 274(5284): 99-102.

Physical, morphological and functional differences between ph 5.8 and 7.4 aggregates of the Alzheimer's amyloid peptide Abeta.

Wood SJ, Maleeff B, Hart T, Wetzel R

Journal of molecular biology (1996) 256(5): 870-7.

Water-soluble Abeta (N-40, N-42) oligomers in normal and Alzheimer disease brains. Kuo YM, Emmerling MR, Vigo-Pelfrey C, Kasunic TC, Kirkpatrick JB, Murdoch GH, Ball MJ, Roher AE The Journal of biological chemistry (1996) 271(8): 4077-81.