

## Monoclonal Antibody to Amyloid Beta (17-24) - Biotin

**Catalog No.:** BM2568B  
**Quantity:** 0.1 ml  
**Concentration:** 1mg/ml (OD280)  
**Host / Isotype:** Mouse / IgG2b  
**Recommended Isotype Controls:** SM12B  
**Clone:** 4G8

**Format:** **State:** Liquid IgG fraction  
**Purification:** Protein A affinity chromatography  
**Buffer System:** PBS without preservatives  
**Label:** Biotin

**Applications:** Western blot.  
ELISA.  
Immunoprecipitation.  
Immunohistochemistry (Formalin-fixed paraffin-embedded tissue sections). Epitope must be re-exposed in fixed tissue by pretreatment of tissue using one of the following procedures:  
1. Formic acid (70%) for 10-30 minutes at room temperature.  
2. HIER (heat Induced Epitope Retrieval)  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** Reactive to amino acid residue 17-24 of Amyloid Beta peptide. Epitope is within amino acids 18-22 (VFFAE). Reacts to the abnormally processed isoforms as well as precursor forms.

**Species:** Human.  
Other species not tested.

**Storage:** Store the antibody in aliquots at -20°C. Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:** 1. Kimura, N., et al., (2005), Age-related changes of intracellular A-beta in cynomolgus monkey brains, *Neuropath. Appl. Neurobiol.*, 31(2), 170-180.  
2. Klyubin, I., et al., (2005), Amyloid beta protein immunotherapy neutralizes A-beta oligomers that disrupt synaptic plasticity in vivo, *Nat. Med.*, 11(5): 556-561.  
3. Iijima, K., et al., (2004), Dissecting pathological effects of human A-beta 40 and A-beta 42 in *Drosophila*: a potential model for Alzheimer's disease, *PNAS*, 101(17), 6623-6628.  
4. Li M, Pisalyaput K, Galvan M, Tenner AJ. Macrophage colony stimulatory factor and interferon-gamma trigger distinct mechanisms for augmentation of beta-amyloid-induced microglia-mediated neurotoxicity. *J Neurochem.* 2004 Nov;91(3):623-33. PubMed PMID:

15485493.

5. Poduslo JF, Curran GL, Peterson JA, McCormick DJ, Fauq AH, Khan MA, et al. Design and chemical synthesis of a magnetic resonance contrast agent with enhanced in vitro binding, high blood-brain barrier permeability, and in vivo targeting to Alzheimer's disease amyloid plaques. *Biochemistry*. 2004 May 25;43(20):6064-75. PubMed PMID: 15147190.

6. Venezia V, Russo C, Repetto E, Salis S, Dolcini V, Genova F, et al. Apoptotic cell death influences the signaling activity of the amyloid precursor protein through ShcA and Grb2 adaptor proteins in neuroblastoma SH-SY5Y cells. *J Neurochem*. 2004 Sep;90(6):1359-70. PubMed PMID: 15341520.

7. Kim, K.S., et al., (1988), Production and characterization of monoclonal antibodies reactive to synthetic cerebrovascular amyloid peptide, *Neuroscience Research Communications*, 2: 121-130.

8. Kim, K.S., et al., (1988), *Neuroscience Research Communications*, 7: 113.