

AM00003BT-N**Monoclonal Antibody to Amyloid beta (1-42 specific) - Biotin**

Alternate names:	Amyloid beta peptide
Quantity:	0.1 mg
Concentration:	0.5 mg/ml
Background:	<p>The beta-amyloid peptide (beta A4), proteolytically released from the amyloid precursor protein (APP), is the principal component of senile plaques in Alzheimer's disease. Cleavage of APP by alpha-secretase or alternatively by beta-secretase leads to generation and extracellular release of soluble APP peptides, S-APP-alpha and S-APP-beta, respectively, and the retention of corresponding membrane-anchored C-terminal fragments, C83 and C99. Subsequent processing of C83 by gamma-secretase yields P3 peptides. This is the major secretory pathway and is nonamyloidogenic. Alternatively, presenilin/nicastrin-mediated gamma-secretase processing of C99 releases the amyloid beta proteins, amyloid-beta 40 (Abeta40) and amyloid-beta 42 (Abeta42), major components of amyloid plaques, and the cytotoxic C-terminal fragments, gamma-CTF(50), gamma-CTF(57) and gamma-CTF(59).</p>
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10B (for use in human samples)
Clone:	8G7
Immunogen:	C-terminal peptide conjugated to KLH
Format:	State: Liquid purified IgG fraction Purification: Size Exclusion Chromatography Buffer System: PBS containing 0.09% Sodium Azide as preservative Label: Biotin
Applications:	Western blot: 1 µg/ml for HRPO/ECL detection. <u>Recommended blocking buffer:</u> Casein/Tween 20 based blocking and blot incubation buffer. ELISA: 0.05 µg/ml. Immunocytochemistry: 1-10 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody specifically interacts with the C-Terminus of beta-Amyloid (1-42) and does not crossreact with beta-Amyloid (1-40). Species: Human. Other species not tested.
Storage:	Store the antibody (aliquote in liquid nitrogen) at -80°C. Avoid repeated freezing and thawing. Thaw aliquots at 37°C. Thawed aliquots may be stored at 2-8°C up to 3 months. Shelf life: one year from despatch.

Pictures:

Immunoblot Analysis: Amyloid beta A4 peptides were applied on SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with 2µg/ml mab bA4 (42)-8G7 for 1h at 15-22°C and developed by ECL (exposure time: 30 sec). Lane 1: bA4(1-40) Lane 2: bA4 (1-42) Lane 3: bA4 (1-43)

