



# Anti-Amyloid $\beta$ monoclonal antibody, clone 83F2 (DMAB6618)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Recombinant Mouse anti-human amyloid $\beta$ monoclonal antibody.
<b>Antigen Description</b>	Alzheimer's disease (AD) is characterized by the presence of extracellular plaques and intracellular neurofibrillary tangles (NFTs) in the brain. The major protein component of these plaques is beta amyloid peptide ( $A\beta$ ), a 40 to 43 amino acid peptide cleaved from amyloid precursor protein by beta-secretase and a putative $\gamma$ secretase. Increased release of the 'longer forms' of $A\beta$ peptide, $A\beta$ 42 or $A\beta$ 43, which have a greater tendency to aggregate than $A\beta$ 40, occurs in individuals expressing certain genetic mutations, expressing certain ApoE alleles, or may involve other, still undiscovered, factors. Many researchers theorize that it is this increased release of $A\beta$ 42/ $A\beta$ 43 which leads to the abnormal deposition of $A\beta$ and the associated neurotoxicity in the brains of affected individuals. This antibody specifically reacts human $A\beta$ N-terminal end, therefore it is very useful to detect APP fragments generated by $\beta$ -secretase cleavage.
<b>Specificity</b>	Human Amyloid $\beta$ N-terminal specific. Reacts with both soluble and fibrillar $A\beta$ to a similar degree. Not react with non-cleaved APP. Not cross-react with mouse and rat.
<b>Immunogen</b>	Synthetic peptide of a part of human Amyloid $\beta$ (1-16) (DAEFRHDSGYEVHHQK).
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	83F2
<b>Purification</b>	Affinity purified with antigen peptide.
<b>Conjugate</b>	Unconjugated

<b>Applications</b>	IHC-P, WB, IP
<b>Format</b>	Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN <sub>3</sub> .
<b>Size</b>	200 µg, 1 mg
<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	-20 °C, Avoid freeze / thaw cycles

## BACKGROUND

<b>Introduction</b>	Amyloid beta (Aβ or Abeta) is a peptide of 36-43 amino acids that is processed from the Amyloid precursor protein. While it is most commonly known in association with Alzheimer"s disease, it does not exist specifically to cause disease. Evidence has been found that Aβ has multiple non-disease activities.
<b>Keywords</b>	Aβ; Abeta; Amyloidβ (N); CTFgamma; A4 amyloid protein; A4; A4_HUMAN; AAA; ABETA; ABPP; AD 1; AICD-50; AICD-57; AICD- 59; AID(50); AID(57); AID(59); Alzheimer Disease 1; Alzheimer disease amyloid protein; Alzheimer"s Disease Amyloid Protein; Amyloid beta (A4) precursor protein; Amyloid beta A4 protein; Amyloid Beta A4 Protein Precursor Isoform A; Amyloid Beta A4 Protein Precursor Isoform B; Amyloid Beta A4 Protein Precursor Isoform C; Amyloid Beta Peptide; Amyloid Beta Peptide; Amyloid Beta protein; Amyloid intracellular domain 50; Amyloid intracellular domain 57; Amyloid intracellular domain 57; Amyloid Of Aging And Alzheimer Disease; APP; APPI; Beta amyloid peptide; Beta-APP40; Beta-APP42; C31; Cerebal Vascular Amyloid Peptide; Cerebral vascular amyloid peptide; CVAP; Gamma-CTF(50); Gamma- CTF(57); Gamma-CTF(59); Human mRNA For Amyloid A4 Precursor Of Alzheimer"s Disease; Peptidase nexin II; peptidase nexin II; PN 2; PN II; PN-II; PNII; PREA4; Protease Nexin II; Protease nexin-II; S-APP-alpha; S-APP-beta