

## **beta-Amyloid (Aβ) [1-16]. Mouse Monoclonal Antibody 6E10 , Human**

APP

### **BACKGROUND**

Beta-amyloid peptides are lipophilic metal chelators with metal-reducing activity. They bind transient metals such as copper, zinc and iron. and *in vitro*, can reduce Cu(2+) and Fe(3+) to Cu(+) and Fe(2+), respectively. Beta-amyloid peptides bind to lipoproteins and apolipoproteins E and J in the CSF and to HDL particles in plasma, inhibiting metal-catalyzed oxidation of lipoproteins. Promotes both tau aggregation and TPK II-mediated phosphorylation. Interaction with overexpressed HADH2 leads to oxidative stress and neurotoxicity.1 The gamma-CTF peptides as well as the caspase-cleaved peptides, including C31, are potent enhancers of neuronal apoptosis

### **ORDERING INFORMATION**

**CATALOG NUMBER**  
X1886M

**SIZE**  
100 µg

**FORM**  
Unconjugated

**HOST/CLONE**  
Mouse Clone 6E10

**FORMULATION**  
In PBS without preservatives or carrier proteins

**CONCENTRATION**  
1 mg/ml

**ISOTYPE**  
IgG1

**APPLICATIONS**  
IHC, WB, IP, E, BS

### **IMMUNOGEN**

Synthetic peptide corresponding to amino acids 1-16 of Aβ (β-amyloid) peptide.

### **SPECIES REACTIVITY**

Human

### **COMMENTS**

Optimal concentration should be evaluated by serial dilutions. The antibody has been used in the immunohistochemical detection of Aβ in fixed sections of Alzheimer's Disease (AD) brain. When used in immunohistochemistry, the epitope must be re-exposed using either formic acid treatment (70% for 10-30 minutes at room temperature) or heat induced epitope retrieval. This antibody has also been used in other procedures including: ELISA, immunoprecipitation, and Western blotting.

### **STORAGE**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

### **STABILITY**

Products are stable for one year from purchase when stored properly

**For research use only. Not for use in human diagnostics or therapeutics.**

**POSITIVE CONTROL/TISSUE EXPRESSION**

Expressed in all fetal tissues examined with highest levels in brain, kidney, heart and spleen. Weak expression in liver. In adult brain, highest expression found in the frontal lobe of the cortex and in the anterior perisylvian cortex-opercular gyri. Moderate expression in the cerebellar cortex, the posterior

**SHIP CONDITIONS**

Ship on gel ice, store at -20°C immediately upon arrival

**REFERENCES**

**LAST MODIFIED** 9/10/2007

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