

Ordering Information

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HGNC name: APBA2

RRID: [AB_2572226](https://eutils.ncbi.nlm.nih.gov/entrez/eutils/rrid.cgi?db=AB)

Immunogen: 1-42 human amyloid A β epitope is sequence 1-16

Format: Antibody is supplied as an aliquot of 1 mg/mL of affinity purified antibody.

Storage: Purified antibody at 1mg/mL in 50% PBS, 50% glycerol plus 5mM Na₃

Recommended dilutions:

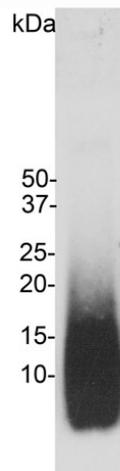
Western blot: 1:1,000-1:2,000 IF/

IHC: 1:1,000.

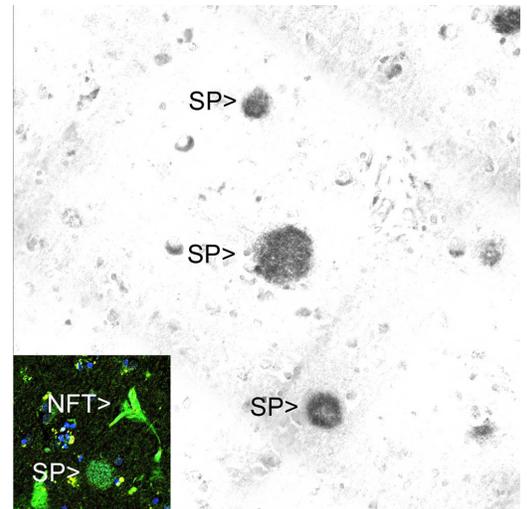
References:

1. Levites, Y., Das, P., Price, R. W., Rochette, M. J., Kostura, L. A., McGowan, E. M., Murphy, M. P., and Golde, T. E. Anti-Abeta42- and anti-Abeta40-specific mAbs attenuate amyloid deposition in an Alzheimer disease mouse model, *The Journal of clinical investigation* **116**:193-201 (2006).

| Applications | Host | Isotype | Molecular Wt. | Species Cross-Reactivity |
|-----------------|-------|---------|---------------|--------------------------|
| WB, IF/ICC, IHC | Mouse | IgG2a | 5kDa | Hu |



Blot of amyloid β peptide blotted with MCA-AB9. The MCA-AB9 antibody recognizes monomeric amyloid β peptide running at 5kDa and higher molecular weight amyloid β aggregates.



Immunohistochemical analysis of a region of cerebral cortex from an Alzheimer's disease (AD) patient stained with MCA-AB9, the signal detected with HRP and DAB. Senile plaques are labeled "SP". The region of the lowest of the three plaques is shown in the inset stained with the fluorescent dye thioflavin-S. This dye binds to not only the senile plaque but also a neurofibrillary tangle (NFT), the other pathological hallmark of AD, which does not contain A β .

Background: Alzheimer's disease (AD) is a serious and common age related dementia which is characterized by the formation of senile plaques and neurofibrillary tangles. Senile plaques are extracellular accumulations of insoluble proteins found in cortical regions. A major component of senile plaques is β -amyloid, a.k.a. A β , a peptide predominantly of 42 or 40 amino acids.

The A β peptide is derived from a section of the membrane spanning domain and the immediate extracellular region of a much larger protein called the amyloid precursor protein (APP). This is an abundant protein of poorly understood function.

The A β peptides are generated by the activity of proteases called secretases, specifically the β and γ secretases. Certain mutations in the APP gene are associated with familial forms of AD, as are mutations in the genes encoding proteins forming the secretase enzymes, in line with the hypothesis that A β accumulation is central to the AD disease process.

Our antibody recognizes amino acids 1-16 of the A β peptide and works well on western blots, on formalin fixed sections and as a capture reagent in ELISA. It was originally developed in the Mayo Clinic in Jacksonville in the laboratory of Dr. Todd Golde.

FOR RESEARCH USE ONLY. NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE.

Abbreviation Key:

mAb—Monoclonal Antibody pAb—Polyclonal Antibody WB—Western Blot IF—Immunofluorescence ICC—Immunocytochemistry IHC—Immunohistochemistry E—ELISA Hu—Human Mo—Monkey Do—Dog Rt—Rat Ms—Mouse Bo—Cow Po—Pig Ho—Horse Ch—Chicken Dr—*D. rerio* Dm—*D. melanogaster* Ce—*C. elegans* Sc—*S. cerevisiae* Sa—*S. aureus* Ec—*E. coli*.