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Store at -20C
#2450

APP/ β -Amyloid (NAB228) Mouse mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IHC-P, IF-F	Reactivity: H Mk B	Sensitivity: Endogenous	MW (kDa): 100 to 140	Source/Isotype: Mouse IgG2a	UniProt ID: #P05067	Entrez-Gene Id: 351
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Product Usage Information

Application

Western Blotting
Immunohistochemistry (Paraffin)
Immunofluorescence (Frozen)

Dilution

1:1000
1:100 - 1:400
1:200 - 1:800

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #92384.

Specificity/Sensitivity

APP/beta-Amyloid (NAB228) Mouse mAb detects endogenous levels of APP/beta-Amyloid protein. Although this antibody recognizes both the phospho and non-phospho forms of the protein, it has been shown to prefer the phosphorylated form in some systems.

Species predicted to react based on 100% sequence homology

Dog, Pig

Source / Purification

Monoclonal antibody is produced by immunizing animals with beta-amyloid and the epitope maps to the amino terminus of beta-amyloid (Lee et al., 2003).

Background

Amyloid β (A β) precursor protein (APP) is a 100-140 kDa transmembrane glycoprotein that exists as several isoforms (1). The amino acid sequence of APP contains the amyloid domain, which can be released by a two-step proteolytic cleavage (1). The extracellular deposition and accumulation of the released A β fragments form the main components of amyloid plaques in Alzheimer's disease (1). APP can be phosphorylated at several sites, which may affect the proteolytic processing and secretion of this protein (2-5). Phosphorylation at Thr668 (a position corresponding to the APP695 isoform) by cyclin-dependent kinase is cell-cycle dependent and peaks during G2/M phase (4). APP phosphorylated at Thr668 exists in adult rat brain and correlates with cultured neuronal differentiation (5,6).

Background References

- Selkoe, D.J. (1996) *J Biol Chem* 271, 18295-8.
- Caporaso, G.L. et al. (1992) *Proc Natl Acad Sci USA* 89, 3055-9.
- Hung, A.Y. and Selkoe, D.J. (1994) *EMBO J* 13, 534-42.
- Suzuki, T. et al. (1994) *EMBO J* 13, 1114-22.
- Ando, K. et al. (1999) *J Neurosci* 19, 4421-7.
- Iijima, K. et al. (2000) *J Neurochem* 75, 1085-91.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin) **IF-F:** Immunofluorescence (Frozen)

Cross-Reactivity Key

H: Human **Mk:** Monkey **B:** Bovine

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