



Anti-Amyloid Precursor Protein (APP N-terminus) antibody, rabbit serum (AN2) # 74-106 100ul

The Alzheimer amyloid precursor protein (APP) is an integral membrane protein expressed in many tissues and concentrated in the synapses of neurons. Its primary function is not known, though it has been implicated as a regulator of synapse formation and neural plasticity. APP is best known and most commonly studied as the precursor molecule whose proteolysis generates amyloid beta $(A\beta)$, a 39 -42 amino acid peptide whose amyloid fibrillar form is the primary component of amyloid plaques found in the brains of Alzheimer's disease patients. Isoform APP695 lacking the protease inhibitor domain is the predominant form in neuronal tissues. An antibody (named AN2) against the N-terminus of human APP (aa 18-38) was raised in rabbit.

Applications

1. Western blot (dilution: 1/3,000-1/1,000)

2. Immunocytochemistry (dilution: 1/1,000-1/500)

Other applications have not been tested.

Specification

Tel: 408-638-7415

Immunogen: Synthetic peptide corresponding to the N-terminus (aa 18-38) of human APP

Specificity: Specific to human, mouse and rat Form: Antiserum with 0.05% sodium azide Storage: Shipped at 4°C and stored at -20°C

Data Link: UniProtKB/Swiss-Prot P05067 (A4_HUMAN)

References: This antibody was used in ref.3 and 4.

- 1. Kang HG *et al.* (1987) "The precursor of Alzheimer's disease amyloid A4 protein resembles a cell-surface receptor." *Nature* 325: 33-736 PMID: 2881207
- 2. Selkoe DJ (1994) "Normal and abnormal biology of the beta-amyloid precursor protein." *Annu. Rev. Neurosci.* 17: 489-517 PMID: <u>8210185</u>
- 3. Nishimura I *et al.* (2002) "Cell death induced by a caspase-cleaved transmembrane fragment of the Alzheimer amyloid precursor protein." *Cell Death Differ.* 9: 199-208 PMID: <u>11840170</u>
- 4. Nishimura I *et al.* (2003) "Upregulation and antiapoptotic role of endogenous Alzheimer amyloid precursor protein in dorsal root ganglion neurons." *Exp. Cell Res.* 286: 241-251 PMID: 12749853





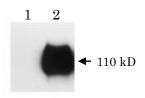


Fig.1 Western blot analysis of APP.

Human NT2 neurons infected with adenovirus expressing β -galactosidase (lane 1) or wild-type APP (lane 2) were analyzed by Western blotting using this antibody. Wild-type APP was abundantly expressed in NT2 cells (ref. 3).

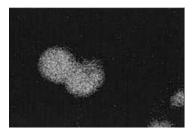


Fig.2 Immunocytochemistry for APP. Mouse dorsal root ganglion cells were treated with this antibody to examine neuronal APP expression (ref. 4).

Related products:

Tel: 408-638-7415

- # 74-104 anti-APP (C-terminus) antibody
- # 74-108 anti-APP (C-terminus of the caspase3-cleaved APP) antibody
- # 74-110 anti-APPΔ31(specific to C-terminal APPΔ31) antibody