

anti-Amyloid Precursor Protein (APP N-terminus) antibody, rabbit serum (AN2)

074-106 100 ul

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 β), a 39- to 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 blotting (dilution: 1/3,000-1/1,000)
2. Immunocytochemistry (dilution: 1/1,000-1/500)

Other applications have not been tested.

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

Specificity: Specific to human, mouse and rat APP

Form: Antiserum added with 0.05% sodium azide

Storage: Shipped at 4 and stored at -20

Data Link: Swiss-Prot [P05067](#)

References: This antibody has been 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: [8210185](#)
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: [11840170](#)
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](#)

Related products: #74-104 anti-APP (C-terminal) antibody, #74-108 anti-APP (C-terminal of the caspase 3- cleaved APP) antibody, #74-110 anti-APP 31 (specific to C-terminal APP 31) antibody

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3-6-7 Kasumigaseki, Chiyoda-ku Tokyo 100-0013 JAPAN

Tel: +81-3-5510-2347 Fax: +81-3-5510-0134

E-mail: exp-pet@sceti.co.jp URL: www.sceti.co.jp/export/

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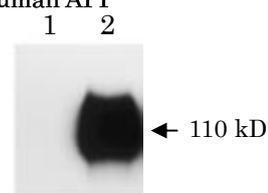


Fig.1 Western blot analysis of APP. Human NT2 neurons infected with adenovirus expressing β -galactosidase (lane 1) or wild-type APP (lane 2) were analyzed by Western blotting using this antibody. Wild-type APP was abundantly expressed in NT2 cells (ref.3).

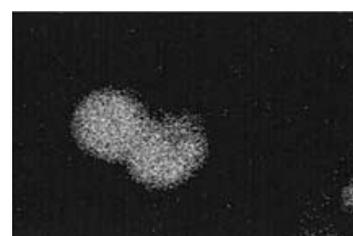


Fig.2 Immunocytochemistry for APP. Mouse dorsal root ganglion cells were treated with this antibody to examine neuronal APP expression (ref.4).