

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

Product code	74-106
Size	100 µl
Storage	Store 4°C for short term For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.05% sodium azide
Purity	Rabbit antiserum
Immunogen	Synthetic peptide corresponding to the N-terminus (aa 18-38) of human APP
Isotype	Rabbit IgG
Reactivity	Specific to human, mouse and rat APP
Special notes	N/A
Application	1. Western blotting (dilution: 1/3,000-1/500) 2. Immunocytochemistry (dilution: 1/1,000-1/500) Other applications have not been tested.
Background	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 (Aβ), 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.
Data Link	UniProtKB human P05067 , mouse P12023
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 74-106 Anti-Amyloid Precursor Protein (APP N-terminus) antibody, rabbit serum (AN2)

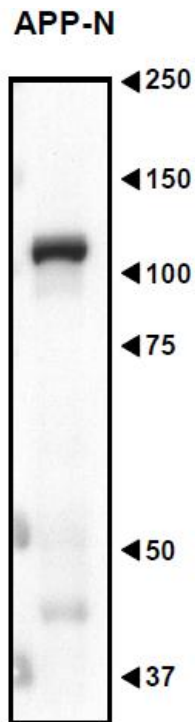


Fig.1. Western blot analysis of Amyloid Precursor Protein in the crude extract of mouse embryo with anti-APP N-terminus antibody (AN2).

The extract (10 µg protein)) was prepared from cerebral cortex of E 16.5 mouse embryo. The anti-Amyloid Precursor Protein (N-terminus) antibody (AN2) was used at 1/500 dilution. Molecular mass of mouse APP is 87 kDa. The numbers are positions of marker proteins shown in kDa.

APP undergoes various post-translational modification such as N- and O-glycosylation, proteolytic cleavage and phosphorylation.

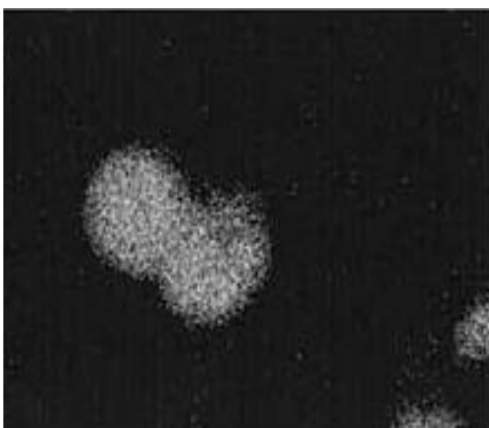


Fig.2 Immunocytochemistry for APP.

Mouse dorsal root ganglion cells were treated with this antibody at 1/500 dilution to examine neuronal APP expression

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](#) . WB, IC (human)
4. Nishimura I *et al.* (2003) "Upregulation and antiapoptotic role of endogenous Alzheimer amyloid precursor protein in dorsal root ganglion neurons." *Exp Cell Res.* 2003 Jun 10;286(2):241-51.PMID: [12749853](#) . IC (mouse)