POLYCLONAL ANTIBODY

Anti-Amyloid Precursor Protein (APP C-terminus) antibody, (AC1)

Catalog No. 74-104EX

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. An antibody (named AC1) against the C-terminus of human APP was raised in rabbit (ref.2).

Product type
Primary antibodies

Host
Rabbit

Source
Serum

Form
Antiserum added with 0.05% sodium azide

Volume
100µL

Immunogen
Synthetic peptide corresponding to the C-terminus (aa 671-695) of human APP695

Application notes
1. Western blotting (dilution: 1/3,000)
2. Immunocytochemistry (dilution: 1/1,000)
3. Immunohistochemistry (dilution: 1/500)

Other applications have not been tested.

Data Link
UniProtKB/Swiss-Prot P05067 (A4_HUMAN)

Reactivity
Specific to human, mouse and rat APP

Expiration
Shipped at 4℃ and stored at -20℃

References

Anti-Amyloid Precursor Protein (APP C-terminus) antibody, rabbit serum (AC1)


**Related product**

- #74-102EX anti-Activated caspase3 antibody
- #74-106EX anti-APP (N-terminus) antibody
- #74-108EX anti-APP (C-terminus of the caspase3-cleaved APP) antibody
- #74-110EX anti-APPΔ31 (specific to C-terminal APPΔ31) antibody

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**Fig. 1** Endogenous expression of APP in mouse P19 cells during neural differentiation was analysed by Western blotting using this antibody (ref.2).

- lane 1, undifferentiated P19 cells (U);
- lane 2, day 3;
- lane 3, day 4;
- lane 4, day 7;
- lane 5, day 12;
- lane 6, day 15;
- lane 7, day 17.

APP species with 105-120K markedly increased during days 3-12, but declined thereafter. On the other hand, APP species with 115-130K were detected on day 15 and 17.
Fig. 2  Immunocytochemistry for APP (ref 4).
Mouse dorsal root ganglion neurons were cultured in the presence of nerve growth factor (NGF), fixed at indicated time points, and immunostained for the C-terminus of APP with this antibody. Left panels are differential interference contrast images of the same fields. APP immunoreactivity was very low at 0 h but increased in neuronal somata (arrows), neurites (arrowheads) 3-12 h after NGF treatment, a period when neurites showed a marked outgrowth. APP immunoreactivity decreased at 36 h.