Polyclonal Antibody

Anti-APP-C31 (C-terminal fragment of the caspase 3-cleaved APP) antibody, (ACT1)

**Background**

The **Alzheimer amyloid precursor protein (APP)** is a transmembrane protein whose abnormal processing is associated with the pathogenesis of Alzheimer’s disease. APP695 lacking the protease inhibitor domain is the predominant form in neuronal tissues. APP695 is cleaved by caspases into the 664-residue amino (N)-terminal fragment that lacks the carboxyl C-terminal 31-residues (APP C31) and the 31-residues C-terminal fragment (**APP-C31**). Both fragments might be potent inducers of neuronal apoptosis. An antibody (named ACT1) against the N-terminus of caspase 3-generated APP C-terminal 31 aa of human APP695 (**APP-C31**) was raised in rabbit.

**Product type**

Primary antibodies

**Host**

Rabbit

**Source**

Serum

**Form**

Antiserum added with 0.05% sodium azide

**Volume**

100µL

**Concentration**

1. Western blotting (dilution: 1/3,000-1/1,000)
2. Immunocytochemistry (dilution: 1/1,000-1/500)
3. ELISA

These applications were confirmed in the laboratory of Prof. K, Yoshikawa of Osaka University. (ref.3).

Other applications have not been tested.

Optimal dilutions/concentrations should be determined by the end user.

**Reactivity**

Reactive to human, mouse and rat. Specific to the N-terminal end of the caspase 3-generated APP-C31

**Storage**

Shipped at 4°C and stored at -20°C

**References**


Data Link

UniProtKB/Swiss-Prot P05067 (A4_HUMAN)
Anti-APP-C31 (C-terminal fragment of the caspase 3-cleaved APP) antibody, rabbit serum (ACT1)

Related product

- #74-102EX anti-Activated caspase3 antibody
- #74-104EX anti-APP (C-terminus) antibody
- #74-106EX anti-APP (N-terminus) antibody
- #74-110EX anti-APPΔ31 (specific to C-terminal APPΔ31) antibody

Fig.1 Immunocytochemistry for APPΔC31 and APP-C31: Generation of the caspase-cleaved fragments in NT2 neurons (neurally differentiated human NT2 embryonic carcinoma cells) overexpressing wild type APP (ref.3).

NT2 neurons were fixed 72 h after infection with adenovirus vector expressing wild-type APP and stained for the N-terminus of APP (P2-1, mouse monoclonal antibody), chromosomal DNA (Hoechst), the C-terminus of APPΔC31 (SAC) or the N-terminus of APP-C31 (ACT1). Most of wild-type APP-accumulating neurons with shrunken and fragmented nuclei contain SAC- and ACT1-immunoreactivities (arrows), but non-neuronal cells are hardly labeled with SAC and ACT1 (arrowheads).

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