Datasheet for ABIN350071

anti-APP antibody (AA 400-450)

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Overview

Quantity:	500 µg
Target:	APP
Binding Specificity:	AA 400-450
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This APP antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Rabbit antibody to APP (400-450)
Immunogen:	A synthetic peptide from AA 400-450 of human APP conjugated to blue carrier protein was used as the antigen.
Isotype:	IgG
Specificity:	Specific for APP.
Cross-Reactivity:	Human, Mouse, Rat
Cross-Reactivity (Details):	Other species not yet tested.
Purification:	IgG

Target Details

Target:	APP
Alternative Name:	APP (APP Products)
Background:	This gene encodes a cell surface receptor and transmembrane precursor protein that is cleaved by secretases to form a number of peptides. Some of these peptides are secreted and can bind to the acetyltransferase complex APBB1/TIP60 to promote transcriptional activation while others form the protein basis of the amyloid plaques found in the brains of patients with Alzheimer disease. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebroarterial amyloidosis (cerebral amyloid angiopathy). Multiple transcript variants encoding several different isoforms have been found for this gene. SUBCELLULAR LOCATION: Membrane, Single-pass type I membrane protein. Membrane clathrin-coated pit. Note: Cell surface protein that rapidly becomes internalized via clathrin-coated pits. During maturation the immature APP (N-glycosylated in the endoplasmic reticulum) moves to the Golgi complex where complete maturation occurs (O-glycosylated and sulfated). After alpha-secretase cleavage soluble APP is released into the extracellular space and the C-terminal is internalized to endosomes and lysosomes. Some APP accumulates in secretory transport vesicles leaving the late Golgi compartment and returns to the cell surface. Gamma-CTF(59) peptide is located to both the cytoplasm and nuclei of neurons. It can be translocated to the nucleus through association with Fe65. Beta-APP42 associates with FPRL1 at the cell surface and the complex is then rapidly internalized (By similarity). APP sorts to the basolateral surface in epithelial cells. During neuronal differentiation the Thr-743 phosphorylated form is located mainly in growth cones moderately in neurites and sparingly in the cell body. TISSUE SPECIFICITY: In the brain non-L-APP isoforms are expressed in neurons isoform APP695 being the predominant form. In astrocytes and microglial cells almost 50 % is L-isoform (appican). DEVELOPMENTAL STAGE: From 6 days to 7 months levels of KPI-containing isoforms increase in the brain cortex and hippocampus. Levels of L-APP increase in all brian regions during the same period but levels are low compared to non-L-APP isoforms.
UniProt:	Q6GSC0
Pathways:	Caspase Cascade in Apoptosis, EGFR Signaling Pathway, Transition Metal Ion Homeostasis, Skeletal Muscle Fiber Development, Toll-Like Receptors Cascades, Feeding Behaviour

Application Details

Application Notes:	IHC WB. A working concentration of 10-50,micro,g,ml is recommended. The optimal concentration should be determined by the end user. Not yet tested in other applications.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitute in 500 µl of sterile water. Centrifuge to remove any insoluble material.
Handling Advice:	Avoid freeze and thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain the lyophilised/reconstituted antibodies frozen at -20°C for long term storage and refrigerated at 2-8°C for a shorter term. When reconstituting glycerol (1:1) may be added for an additional stability. Avoid freeze and thaw cycles.
Expiry Date:	12 months