Datasheet for ABIN7127338

Recombinant anti-APP antibody

2 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	APP
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This APP antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	A synthesized peptide derived from human Amyloid beta A4
Clone:	6F10
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Affinity-chromatography

Target Details

Target:	APP
Alternative Name:	APP (APP Products)
Background:	Background: Functions as a cell surface receptor and performs physiological functions on the

Target Details

	surface of neurons relevant to neurite growth, neuronal adhesion and axonogenesis. Involved in cell mobility and transcription regulation through protein-protein interactions. Can promote transcription activation through binding to APBB1-KAT5 and inhibits Notch signaling through interaction with Numb. Couples to apoptosis-inducing pathways such as those mediated by G(O) and JIP. Inhibits G(o) alpha ATPase activity (By similarity). Acts as a kinesin I membrane receptor, mediating the axonal transport of beta-secretase and presenilin 1. Involved in copper homeostasis/oxidative stress through copper ion reduction. In vitro, copper-metallated APP induces neuronal death directly or is potentiated through Cu(2+)-mediated low-density lipoprotein oxidation. Can regulate neurite outgrowth through binding to components of the extracellular matrix such as heparin and collagen I and IV. The splice isoforms that contain the BPTI domain possess protease inhibitor activity. Induces a AGER-dependent pathway that involves activation of p38 MAPK, resulting in internalization of amyloid-beta peptide and leading to mitochondrial dysfunction in cultured cortical neurons. Provides Cu(2+) ions for GPC1 which are required for release of nitric oxide (NO) and subsequent degradation of the heparan sulfate chains on GPC1. Aliases: Amyloid-beta A4 protein (ABPP) (APPI) (APP) (Alzheimer disease amyloid protein) (Amyloid precursor protein) (Amyloid-beta precursor protein) (Cerebral vascular amyloid peptide) (CVAP) (PreA4) (Protease nexin-II) (PN-II) [Cleaved into: N-APP, Soluble APP-alpha (S-APP-alpha), Soluble APP-beta (S-APP-beta), C99 (Beta-secretase C-terminal fragment) (Beta-CTF), Amyloid-beta protein 42 (Abeta42) (Beta-APP42), Amyloid-beta protein 40 (Abeta40) (Beta-APP40), C83 (Alpha-secretase C-terminal fragment) (Alpha-CTF), P3(42), P3(40), C80, Gamma-secretase C-terminal fragment 59 (Amyloid intracellular domain 59) (AICD-59) (AID(59)) (Gamma-CTF(59)), Gamma-secretase C-terminal fragment 57 (Amyloid intracellular domain 57) (AICD-57) (AID(57)) (Gamma-CTF(57)), Gamma-secretase C-terminal fragment 50 (Amyloid intracellular domain 50) (AICD-50) (AID(50)) (Gamma-CTF(50)), C31], APP, A4 AD1
UniProt:	P05067
Pathways:	Caspase Cascade in Apoptosis, EGFR Signaling Pathway, Transition Metal Ion Homeostasis, Skeletal Muscle Fiber Development, Toll-Like Receptors Cascades, Feeding Behaviour

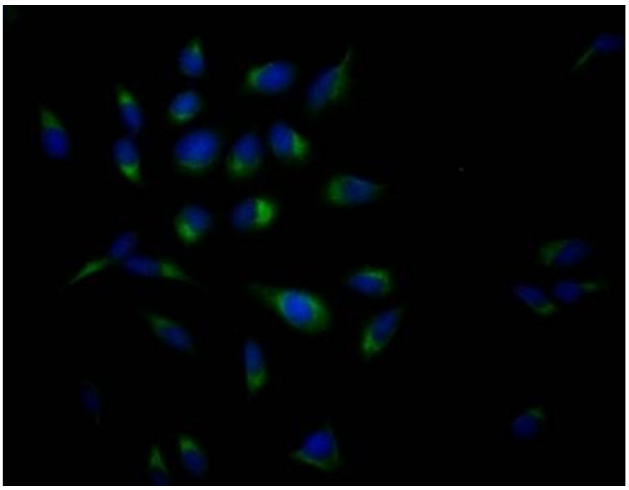
Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200,
Restrictions:	For Research Use only

Handling

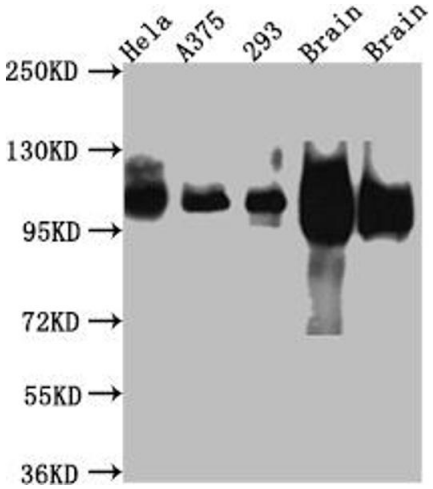
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescence staining of Hela Cells with ABIN7127338 at 1:50, counter-stained with DAPI. The cells were fixed in 4 % formaldehyde, permeated by 0.2 % TritonX-100, and blocked in 10 % normal Goat Serum. The cells were then incubated with the antibody overnight at 4 °C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Western Blotting

Image 2. Western Blot Positive WB detected in: Hela whole cell lysate, A375 whole cell lysate, HEK293 whole cell lysate, Rat Brain whole cell lysate, Mouse Brain whole cell lysate All lanes: Amyloid beta A4 antibody at 1:1000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 87, 35, 77, 79, 79, 81, 83, 85, 86, 73, 85 kDa Observed band size: 100 kDa