

## Amyloid Precursor Protein Rabbit mAb

Catalog No: #52056



Package Size: #52056-1 50ul #52056-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

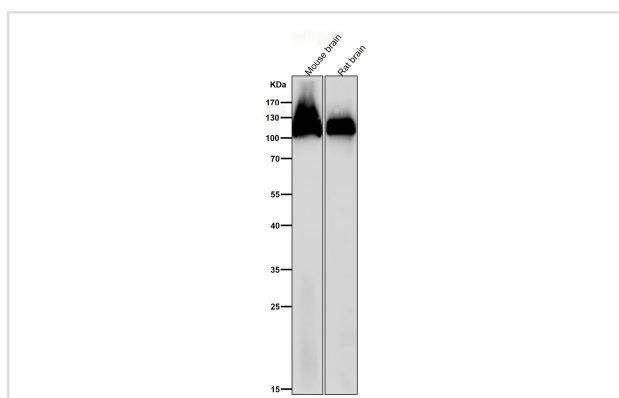
## Description

Product Name	Amyloid Precursor Protein Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Isotype	Rabbit IgG
Purification	Affinity-chromatography
Applications	WB;IHC;IF;IP;FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	A synthetic peptide of human Amyloid Precursor Protein
Conjugates	Unconjugated
Modification	Unmodification
Other Names	ABPP;APP1;Alzheimer disease amyloid protein;Amyloid precursor protein
Accession No.	Swiss-Prot:P05067GenelD:351
Calculated MW	87 kDa
SDS-PAGE MW	105 kDa
Formulation	Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

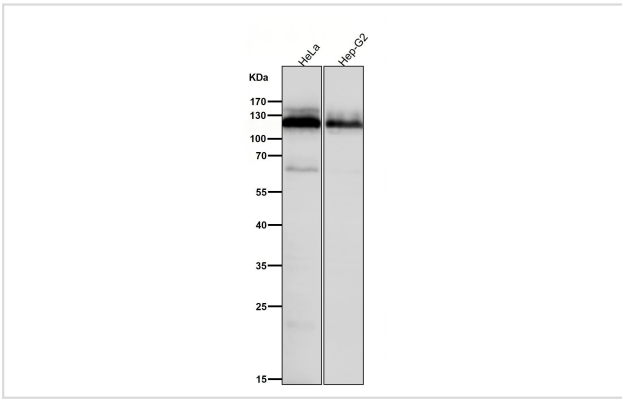
## Application Details

WB 1:1000-1:2000; IHC 1:100-1:200; IF 1:50-1:200; IP 1:20-1:50; FC 1:20-1:100

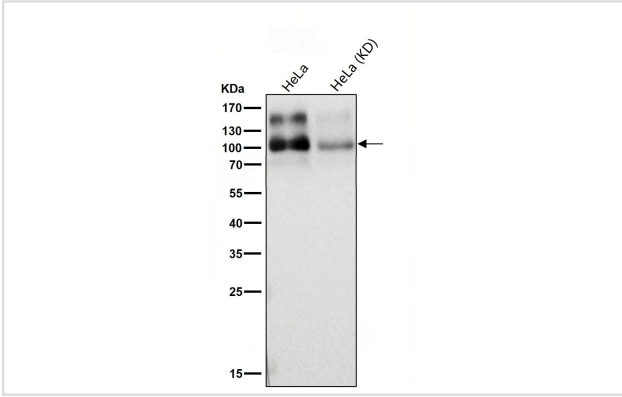
## Images



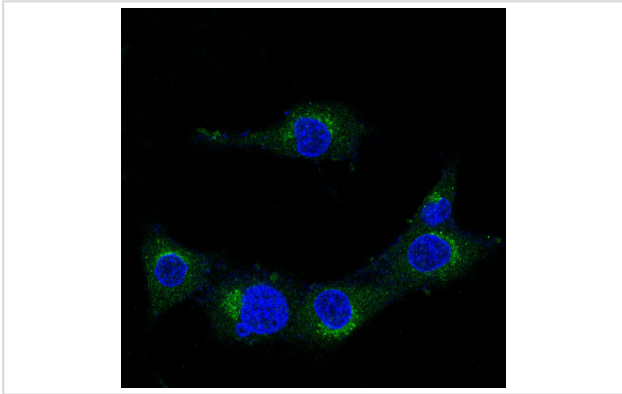
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



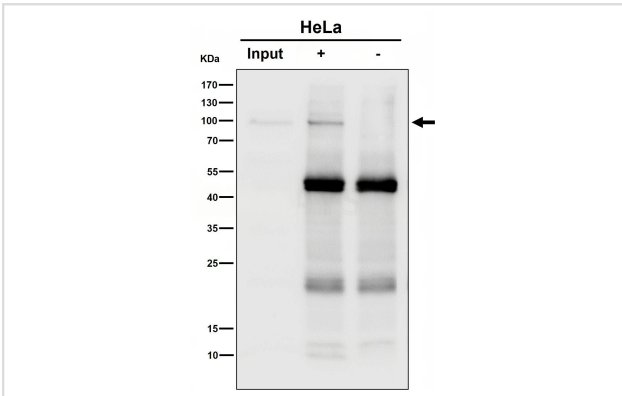
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



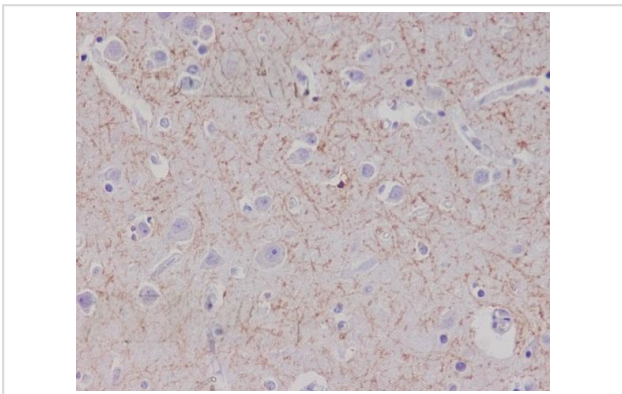
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Immunofluorescent analysis of SH-SY5Y cells, using Amyloid Precursor Protein Rabbit mAb.



Immunoprecipitate (IP) analysis using Amyloid Precursor Protein Rabbit mAb at 1:50 dilution. (WB at 1:1K dilution)



Immunohistochemical analysis of paraffin-embedded human brain, using Amyloid Precursor Protein Rabbit mAb.

## Background

Swiss-Prot Acc.P05067.Functions as a cell surface receptor and performs physiological functions on the surface of neurons relevant to neurite growth, neuronal adhesion and axonogenesis. Interaction between APP molecules on neighboring cells promotes synaptogenesis (PubMed:25122912).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 (By similarity).By acting as a kinesin I membrane receptor, plays a role in axonal anterograde transport of cargo towards synapses in axons (PubMed:17062754, PubMed:23011729).Involved in copper homeostasis/oxidative stress through copper ion reduction. In vitro, copper-metallated APP induces neuronal death directly or is potentiated through Cu<sup>2+</sup>-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<sup>2+</sup> ions for GPC1 which are required for release of nitric oxide (NO) and subsequent degradation of the heparan sulfate chains on GPC1.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.