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Datasheet for ABIN3020680

anti-APP antibody (AA 190-290)

1 Validation

4 Images

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Overview

Quantity:	100 µL
Target:	APP
Binding Specificity:	AA 190-290
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This APP antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	A synthetic peptide corresponding to a sequence within amino acids 190-290 of human APP (NP_000475.1).
Sequence:	AEESDNVDSA DAEEDDSDVW WGGADTDYAD GSEDKVVEVA EEEEVAEVEE EEADDDEDDE DGDEVEEEAE EPYEEATERT TSIATTTTTT TESVEEVVRE V
Isotype:	IgG
Cross-Reactivity:	Human
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

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. In addition, two of the peptides are antimicrobial peptides, having been shown to have bacteriocidal and antifungal activities. 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.,AAA,ABETA,ABPP,AD1,APPI,CTFgamma,CVAP,PN-II,PN2,Amyloid beta A4,APP,Aβ42,preA4,Epigenetics & Nuclear Signaling,Transcription Factors,Signal Transduction,G protein signaling,Cell Biology & Developmental Biology,Apoptosis,Immunology & Inflammation,IL-6 Receptor Signaling Pathway,Neuroscience,Neurodegenerative Diseases,Amyloid Plaque and Neurofibrillary Tangle Formation in Alzheimer's Disease,Neurodegenerative Diseases Markers,APP
Molecular Weight:	34 kDa/72-86 kDa
Gene ID:	351
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:	WB,1:500 - 1:2000,IHC,1:50 - 1:200
Restrictions:	For Research Use only

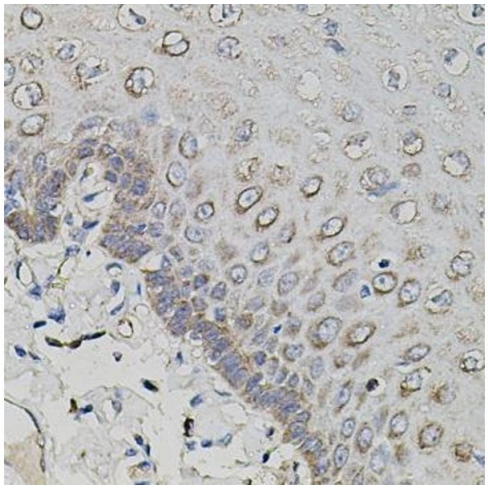
Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

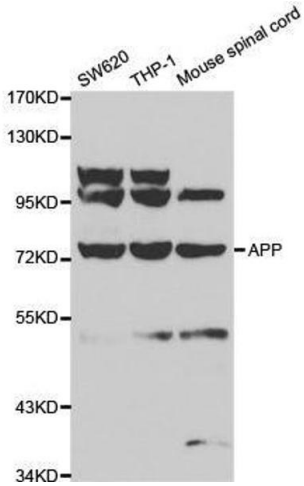
	should be handled by trained staff only.
Handling Advice:	Avoid freeze / thaw cycles
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



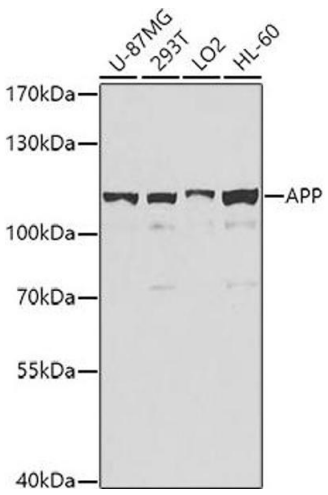
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human esophagus using APP antibody (ABIN3020679, ABIN3020680, ABIN3020681 and ABIN6213663) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using APP antibody.



Western Blotting

Image 3. Western blot analysis of extracts of various cell lines, using APP antibody (ABIN3020679, ABIN3020680, ABIN3020681 and ABIN6213663) at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 10s.

Please check the product details page for more images. Overall 4 images are available for ABIN3020680.

Successfully validated (Immunohistochemistry (IHC))

by Prof. Merighi, Laboratory of Neurobiology, Department of Veterinary Sciences, University of Turin

Report Number: 104427

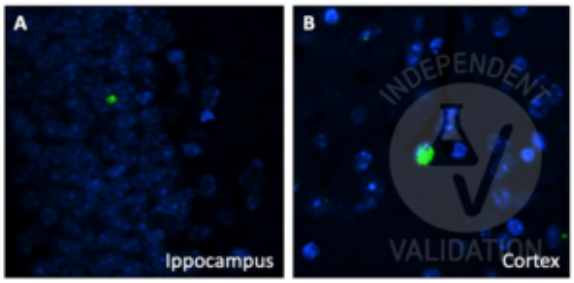
Date: May 12 2022

Target:	APP
Lot Number:	3100080101
Method validated:	Immunohistochemistry (IHC)
Positive Control:	Adult (24 months) mouse brain 3-month-old Taconic mouse Model 1349 brain fixed in 4% paraformaldehyde
Negative Control:	We incubated slices overnight with the blocking solution only and then processed them with the secondary antibody.
Notes:	The anti-APP antibody (Amyloid beta (A4) Precursor Protein) C-Term ABIN3020680 works in IHC-P, especially at higher concentrations (1:50 and 1:100), and without the use of any antigen retrieval treatment.
Primary Antibody:	ABIN3020680
Secondary Antibody:	goat anti-rabbit AF488-conjugated antibody (Invitrogen by Thermo Fisher Scientific, A11034, lot 1971418)
Protocol:	• Perfuse mice with paraformaldehyde 4% in 0.1 M phosphate buffer pH 7.4 and post-fix in the same fixative for an additional 2 h at RT. • Wash, dehydrate, and embed samples in paraffin wax. • Wash several times with 0.01 M PBS. • Cut intestines and brain with a microtome into 6µm sections and mount on glass slides. • After paraffin removal, incubate sections for 1 h at RT in PBS containing 1% albumin from chicken egg white (Sigma, A5378) and 0.3% Triton-X-100 (BioRad, 161-0407, lot 00583) to block non-specific binding sites. • Incubate sections with primary anti-APP antibody (Amyloid beta (A4) Precursor Protein) (N-Term) (antibodies Online, ABIN3020680, lot 3100080101) diluted 1:50, 1:100, and 1:200 in PBS-BSA-PLL ON at RT. • Wash sections 3x 5 min with 0.01 M PBS. • Incubate sections with secondary goat anti-rabbit AF488-conjugated antibody (Invitrogen by Thermo Fisher Scientific, A11034, lot 1971418) diluted 1:500 in 0.1 M PBS for 1 h at RT. • Wash sections 3x 5 min with 0.01M PBS. • Mount specimens in Fluoroshield (Sigma, F6182, lot MKCB0153V).

- Acquire images with a fluorescence microscope and appropriate filter settings for AF488, e.g. Leica DM 6000B fluorescence microscope equipped with a digital camera at 40x magnification.

Experimental Notes:	Antigen retrieval treatment was also tested. In this case, sections were processed for microwave antigen retrieval for 10 min (95-100 °C) in 10 mM sodium citrate buffer (pH 6.0). After 20 min of spontaneous cooling, sections were washed twice for 5 min with distilled water and for 5 min with PBS.

Image for Validation report #104427



Validation image no. 1 for anti-Amyloid beta (A4) Precursor Protein (APP) (AA 190-290) antibody (ABIN3020680)

Staining of beta-amyloid positive cells in the adult mouse brain using ABIN3020680 at 40x magnification.