Datasheet for 600-401-Y51

APP Antibody

Overview

Description:	Anti-APP (RABBIT) Antibody - 600-401-Y51
Item No.:	600-401-Y51
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Accumulation of the amyloid-beta peptide (Abeta) in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. The beta-amyloid protein precursor (APP) is cleaved by one of two beta-secretases (BACE and BACE2), producing a soluble derivative of the protein and a membrane anchored 99-amino acid carboxy-terminal fragment (C99). The C99 fragment serves as substrate for gamma-secretase to generate the 4 kDa amyloid-beta peptide (Abeta), which is deposited in the Alzheimer's disease patient's brains. Recently, Death Receptor 6 (DR6) was found to interact with an amino-terminal fragment of the Beta-amyloid protein (N-APP) in neurons, activating a caspase 6-dependent apoptotic event leading to axonal degeneration and pruning during development, suggesting that these two proteins are involved in neural development and may possibly play a role in Alzheimer's disease.
Synonyms:	APP Antibody, AAA, AD1, PN2, ABPP, APPI, CVAP, ABETA, PN-II, CTFgamma, A4, Amyloid beta A4 protein, APP
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	APP
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-APP antibody was prepared from whole rabbit serum produced by repeated immunizations with an 18 amino acid synthetic peptide near the N-terminus of human APP.
Purity/Specificity:	Anti-APP Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with APP from other sources has not been determined.
Relevant Links:	• UniProtKB - P05067 • GeneID - 351 • NCBI - CAA30050

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-APP Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 87 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1 - 2 µg/mL

Formulation

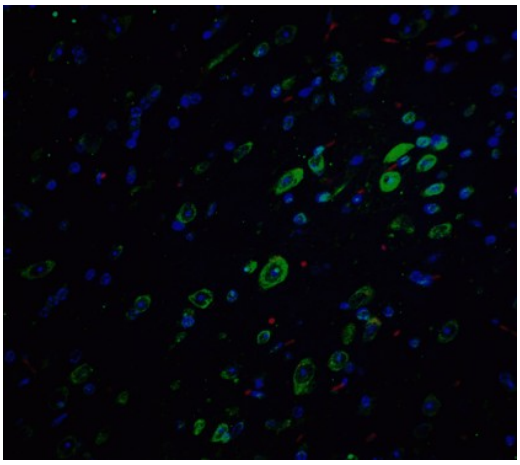
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

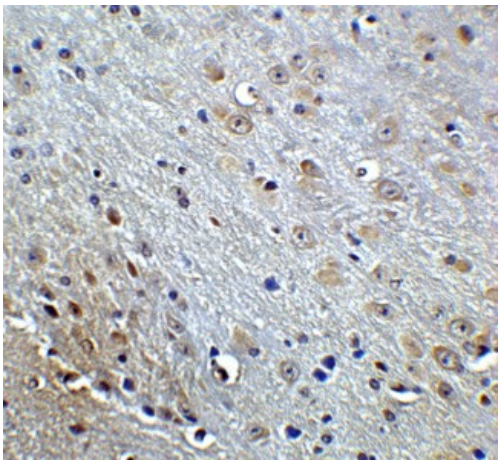
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

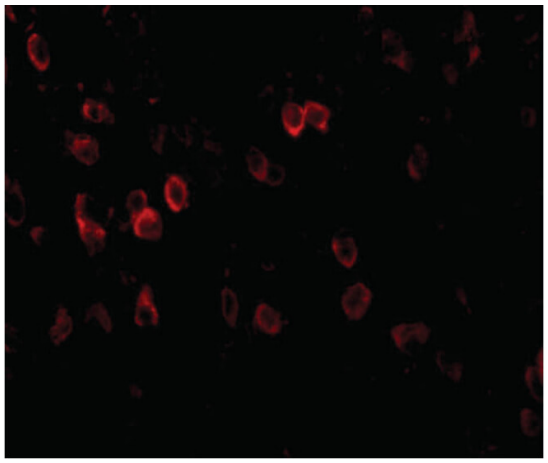
Images



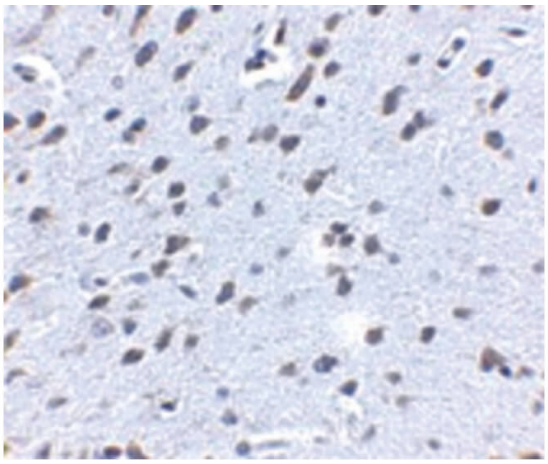
Immunofluorescence Microscopy
Immunofluorescence of APP in mouse brain tissue with APP Antibody at 20 µg/mL. Green: APP antibody. Red: Phylloidin staining. Blue: DAPI staining.



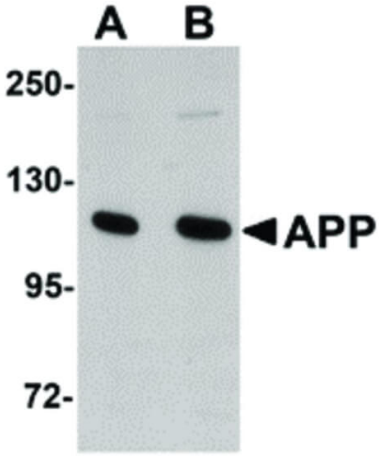
Immunohistochemistry
Immunohistochemistry of APP in mouse brain tissue with APP Antibody at 5 µg/mL.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of APP antibody. Tissue: mouse brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: APP antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: APP is a membrane protein. Staining: APP as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of APP antibody. Tissue: Mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: APP antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: APP is a membrane protein. Staining: APP as precipitated blue signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of APP antibody. Lane 1: Rat brain tissue lysate with APP antibody at 1 µg/mL. Lane 2: Rat brain tissue lysate with APP antibody at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 87 kDa, 115 kDa for APP. Other band(s): APP splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.