Datasheet for 600-401-H11

PION Antibody

Overview

Description:	Anti-PION (RABBIT) Antibody - 600-401-H11
Item No.:	600-401-H11
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Pion antibody detects human PION. 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 patients' brains. PION, or GSAP, selectively increases amyloid-beta production through a mechanism involving its interaction with both gamma-secretase and the APP C-terminal fragment, suggesting that PION may be a potential therapeutic target for the treatment of Alzheimer's disease. Anti-PION antibodies are ideal for investigators involved in neuroscience research.
Synonyms:	Gamma-secretase-activating protein, GSAP, Protein pigeon homolog, Gamma-secretase-activating protein 16 kDa C-terminal form, GSAP-16K, GSAP, PION
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

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

Immunogen:	PION Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the c-terminus of human PION.
Purity/Specificity:	Anti-PION Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with PION with Human, Rat and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with PION from other sources has not been determined. Multiple isoforms of PION are known to exist. PION antibody is predicted to not cross-react with other F-box protein family members.
Relevant Links:	• NCBI - NP_059135.2 • UniProtKB - A4D1B5 • GeneID - 54103

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PION Antibody is tested for use in E, WB, IF, and IHC. Expect a band approximately ~97.8 kDa on specific lysates. Western Blot tested in mouse samples; Immunohistochemistry in human and mouse samples and Immunofluorescence in human and mouse samples. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	20µg/mL
IHC:	5µg/mL
WB:	0.25-1µg/mL

Formulation

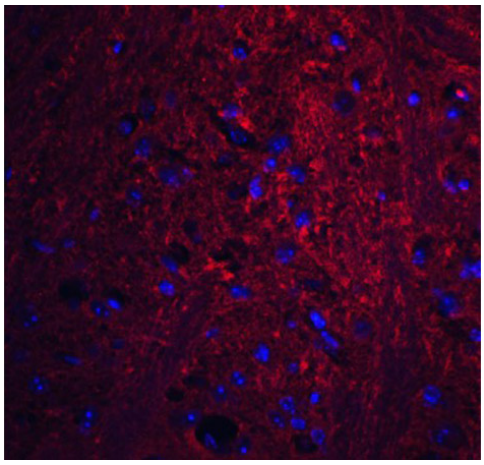
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

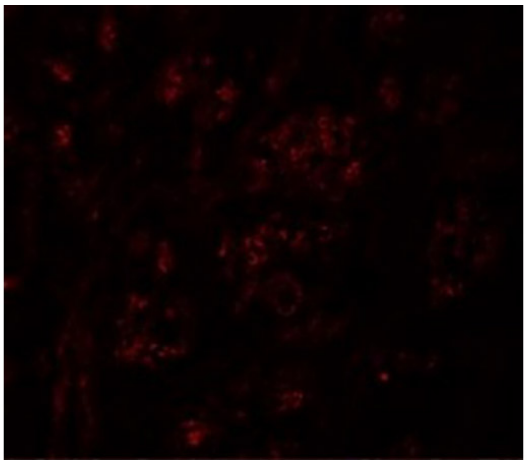
Shipping Condition:	Dry Ice

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.

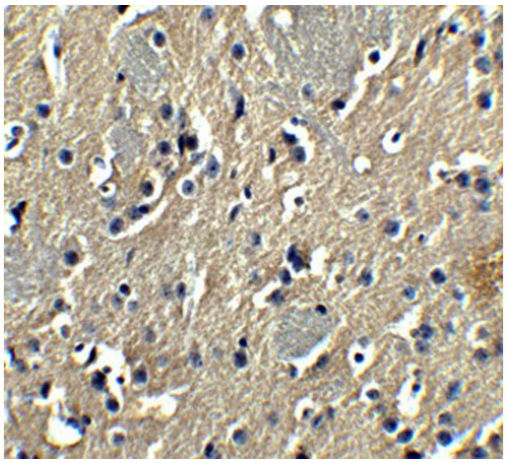
Images



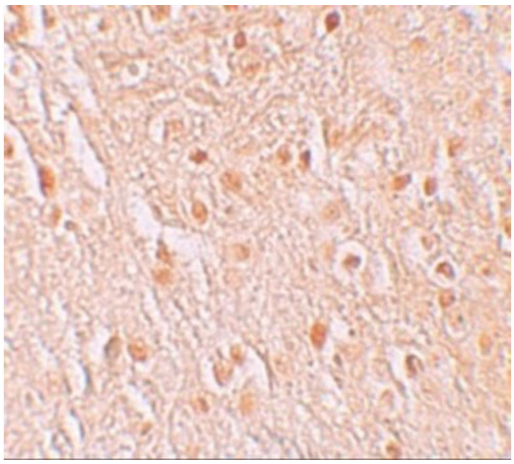
Immunofluorescence Microscopy
Immunofluorescence of PION.
Tissue: mouse brain tissue.
Primary Antibody: PION antibody at 20 µg/mL.
Staining: PION Antibody (red), DAPI staining (blue).



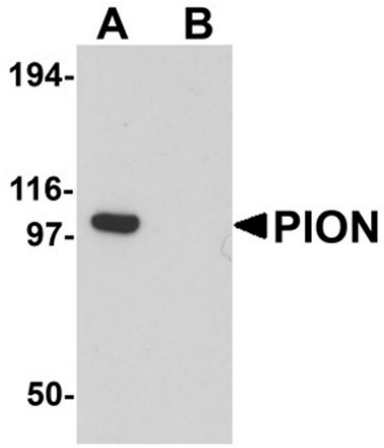
Immunofluorescence Microscopy
Immunofluorescence of PION.
Cell: Human Brain cells.
Primary Antibody: PION antibody at 20 µg/mL.



Immunohistochemistry
Immunohistochemistry of PION.
Tissue: mouse brain tissue.
Primary Antibody: PION antibody at 5 µg/mL.



Immunohistochemistry
Immunohistochemistry of PION.
Tissue: human brain tissue.
Primary Antibody: PION antibody at 5 µg/mL.



Western Blot
Western blot analysis of PION.
Load: EL4 cell lysate.
Primary Antibody: PION antibody at 0.25 µg/mL in (A) the absence and (B) the presence of blocking peptide.

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.