

**PION Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12480b**

### Specification

#### PION Antibody (C-term) - Product Information

Application	IHC-P, WB,E
Primary Accession	<a href="#">A4D1B5</a>
Other Accession	<a href="#">NP_059135.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	537-565

#### PION Antibody (C-term) - Additional Information

##### Gene ID 54103

##### Other Names

Gamma-secretase-activating protein, GSAP, Protein pigeon homolog, Gamma-secretase-activating protein 16 kDa C-terminal form, GSAP-16K, GSAP, PION

##### Target/Specificity

This PION antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 537-565 amino acids from the C-terminal region of human PION.

##### Dilution

IHC-P~1:10~50

WB~1:1000

E~~Use at an assay dependent concentration.

##### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

##### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

##### Precautions

PION Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PION Antibody (C-term) - Protein Information

##### Name GSAP

## Synonyms PION

**Function** Regulator of gamma-secretase activity, which specifically activates the production of amyloid-beta protein (amyloid-beta protein 40 and amyloid-beta protein 42), without affecting the cleavage of other gamma-secretase targets such as Notch. The gamma-secretase complex is an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid-beta precursor protein). Specifically promotes the gamma-cleavage of APP CTF-alpha (also named APP-CTF) by the gamma-secretase complex to generate amyloid-beta, while it reduces the epsilon-cleavage of APP CTF-alpha, leading to a low production of AICD.

## Cellular Location

Golgi apparatus, trans-Golgi network

## Tissue Location

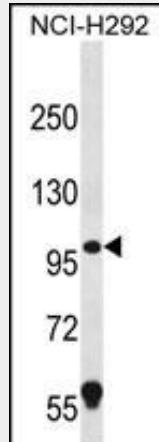
Widely expressed..

## PION Antibody (C-term) - Protocols

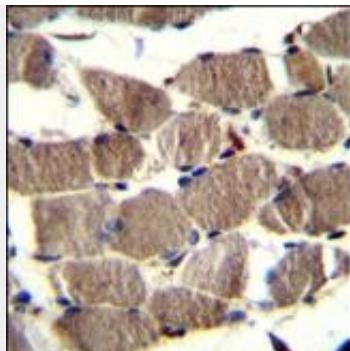
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## PION Antibody (C-term) - Images



PION Antibody (C-term) (Cat. #AP12480b) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the PION antibody detected the PION protein (arrow).



PION Antibody (C-term) (Cat. #AP12480b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PION Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

### **PION Antibody (C-term) - Background**

Accumulation of neurotoxic amyloid-beta is a major hallmark of Alzheimer disease (AD; MIM 104300). Formation of amyloid-beta is catalyzed by gamma-secretase (see PSEN1; MIM 104311), a protease with numerous substrates. PION, or GSAP, selectively increases amyloid-beta production through a mechanism involving its interaction with both gamma-secretase and its substrate, the amyloid-beta precursor protein (APP; MIM 104760) C-terminal fragment (APP-CTF) (He et al., 2010 [PubMed 20811458]).

### **PION Antibody (C-term) - References**

He, G., et al. Nature 467(7311):95-98(2010)  
Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)