

PION Antibody (C-term) Blocking peptide Synthetic peptide Catalog # BP12480b

## Specification

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

Primary Accession

<u>A4D1B5</u>

## PION Antibody (C-term) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### PION Antibody (C-term) Blocking peptide - 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 has 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) Blocking peptide - Protocols

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

### <u>Blocking Peptides</u>

## PION Antibody (C-term) Blocking peptide - Images

### PION Antibody (C-term) Blocking peptide - Background

Accumulation of neurotoxic amyloid-beta is a majorhallmark of Alzheimer disease (AD; MIM 104300). Formation of amyloid-beta is catalyzed by gamma-secretase (see PSEN1; MIM104311), a protease with numerous substrates. PION, or GSAP, selectively increases amyloid-beta production through a mechanisminvolving its interaction with both gamma-secretase and itssubstrate, the amyloid-beta precursor protein (APP; MIM 104760)C-terminal fragment (APP-CTF) (He et al., 2010 [PubMed20811458]).

### PION Antibody (C-term) Blocking peptide - References

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