

Rabbit Anti-PION/GSAP Polyclonal: RC0023-0.1

Intended Use: For Research Use Only

Description: Accumulation of neurotoxic amyloid-beta in the cerebral cortex is a major hallmark in the pathogenesis of Alzheimer's disease. Formation of amyloid-beta is catalyzed by gamma-secretase, 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 C-terminal fragment (APP-CTF), 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. 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.

Specifications

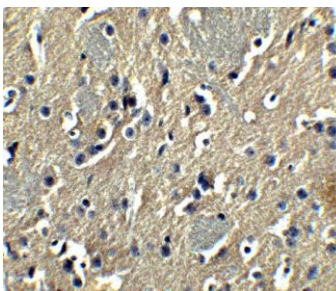
Clone: Polyclonal
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human, mouse, rat
 Immunogen: KLH-conjugated synthetic peptide within the C-term region of human PION
 Localization: Golgi apparatus
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, IF, WB
 Package:

Description	Catalog No.	Size
PION/GSAP Polyclonal Concentrated	RC0023-0.1	0.1 ml

IHC Procedure*

Positive Control Tissue: Brain
 Concentrated Dilution: 100-500
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: Overnight @ 4°C
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE mouse brain tissue stained with anti-PION/GSAP using DAB

References:

1. MicroRNA-4422-5p as a Negative Regulator of Amyloidogenic Secretases: A Potential Biomarker for Alzheimer's Disease. Hajjari SN, et al. Neuroscience 463:108-115, 2021.
2. PTH-induced EndMT via miR-29a-5p/GSAP/Notch1 pathway contributed to valvular calcification in rats with CKD. Wang L, et al. Cell Prolif 54:e13018, 2021.