

PTPRN2 / Phogrin Antibody (aa206-255)
Rabbit Polyclonal Antibody
Catalog # ALS16546**Specification**

PTPRN2 / Phogrin Antibody (aa206-255) - Product Information

Application	IHC, WB
Primary Accession	Q92932
Other Accession	5799
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	111271

PTPRN2 / Phogrin Antibody (aa206-255) - Additional Information**Gene ID** 5799**Other Names**

PTPRN2, ICAAR, Ia-2 beta, IA-2beta, PTPRP, R-PTP-N2, Phogrin, Ptp-np, IAR, KIAA0387, PTP NE-6, Tyrosine phosphatase IA-2 beta

Target/Specificity

PTPRN2 Antibody detects endogenous levels of total PTPRN2 protein.

Reconstitution & StoragePBS (without Mg²⁺, Ca²⁺), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol.
Store at -20°C for up to one year.**Precautions**

PTPRN2 / Phogrin Antibody (aa206-255) is for research use only and not for use in diagnostic or therapeutic procedures.

PTPRN2 / Phogrin Antibody (aa206-255) - Protein Information**Name** PTPRN2**Synonyms** KIAA0387**Function**

Plays a role in vesicle-mediated secretory processes. Required for normal accumulation of secretory vesicles in hippocampus, pituitary and pancreatic islets. Required for the accumulation of normal levels of insulin-containing vesicles and preventing their degradation. Plays a role in insulin secretion in response to glucose stimuli. Required for normal accumulation of the neurotransmitters norepinephrine, dopamine and serotonin in the brain. In females, but not in males, required for normal accumulation and secretion of pituitary hormones, such as luteinizing hormone (LH) and follicle-stimulating hormone (FSH) (By similarity). Required to maintain normal

levels of renin expression and renin release (By similarity). May regulate catalytic active protein-tyrosine phosphatases such as PTPRA through dimerization (By similarity). Has phosphatidylinositol phosphatase activity; the PIPase activity is involved in its ability to regulate insulin secretion. Can dephosphorylate phosphatidylinositol 4,5-bisphosphate (PI(4,5)P2), phosphatidylinositol 5-phosphate and phosphatidylinositol 3-phosphate (By similarity). Regulates PI(4,5)P2 level in the plasma membrane and localization of cofilin at the plasma membrane and thus is indirectly involved in regulation of actin dynamics related to cell migration and metastasis; upon hydrolyzation of PI(4,5)P2 cofilin is released from the plasma membrane and acts in the cytoplasm in severing F-actin filaments (PubMed:26620550).

Cellular Location

Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:P80560}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P80560}. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:P80560}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P80560} Note=Predominantly found on dense-core secretory granules. Sorting to secretory granules in part is dependent of the N-terminal propeptide domain of the precursor and its interaction with CPE (By similarity) Transiently found at the cell membrane, when secretory vesicles fuse with the cell membrane to release their cargo. Is then endocytosed and recycled to secretory vesicles involving clathrin-dependent AP2- mediated endocytosis. Recycled via STX6- but not TTTGN1/TGN38- containing compartments (By similarity). {ECO:0000250|UniProtKB:P80560, ECO:0000250|UniProtKB:Q63475}

Tissue Location

Highest levels in brain and pancreas (PubMed:8954911, PubMed:8798755). Lower levels in trachea, prostate, stomach and spinal cord (PubMed:8798755).

Volume

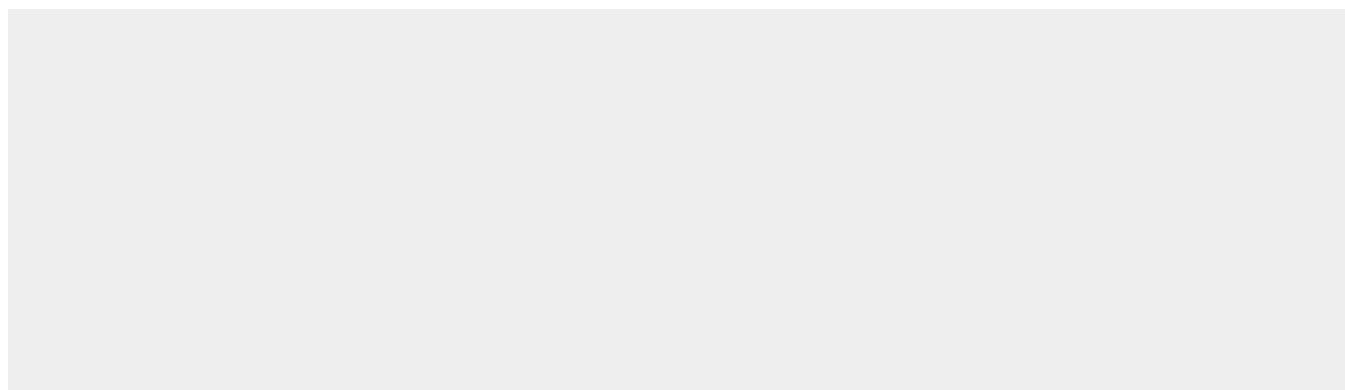
50 µl

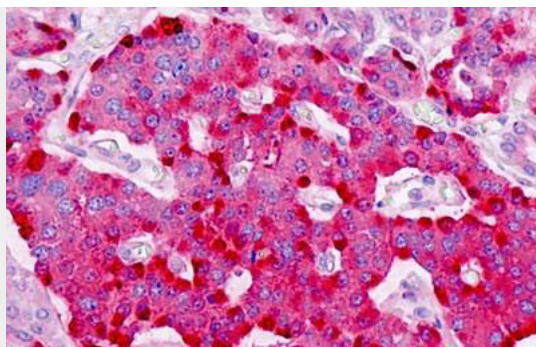
PTPRN2 / Phogrin Antibody (aa206-255) - Protocols

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

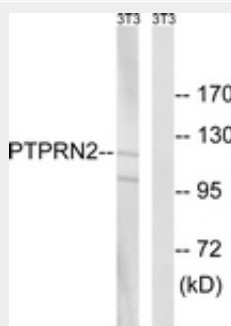
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PTPRN2 / Phogrin Antibody (aa206-255) - Images





Anti-PTPRN2 / Phogrin antibody IHC staining of human pancreas, islet.



Western blot of extracts from NIH-3T3 cells, using PTPRN2 Antibody.

PTPRN2 / Phogrin Antibody (aa206-255) - Background

Implicated in development of nervous system and pancreatic endocrine cells.

PTPRN2 / Phogrin Antibody (aa206-255) - References

- Kawasaki E., et al. Biochem. Biophys. Res. Commun. 227:440-447(1996).
Smith P.D., et al. Biochem. Biophys. Res. Commun. 229:402-411(1996).
Cui L., et al. J. Biol. Chem. 271:24817-24823(1996).
Jiang S., et al. Submitted (DEC-1996) to the EMBL/GenBank/DDBJ databases.
Nagase T., et al. DNA Res. 4:141-150(1997).