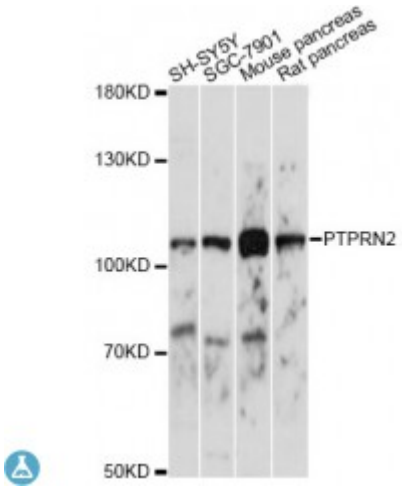
Anti-PTPRN2 Antibody



Description	This gene encodes a protein with sequence similarity to receptor-like protein tyrosine phosphatases. However, tyrosine phosphatase activity has not been experimentally validated for this protein. Studies of the rat ortholog suggest that the encoded protein may instead function as a phosphatidylinositol phosphatase with the ability to dephosphorylate phosphatidylinositol 3-phosphate and phosphatidylinositol 4,5-diphosphate, and this function may be involved in the regulation of insulin secretion. This protein has been identified as an autoantigen in insulin-dependent diabetes mellitus. Alternative splicing results in multiple transcript variants.

Model	STJ116974
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 22-242 of human PTPRN2 (NP_570858.2).
Gene ID	5799
Gene Symbol	PTPRN2
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Highest levels in brain and pancreas
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	Receptor-type tyrosine-protein phosphatase N2 R-PTP-N2
Molecular Weight	111.271 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9677OMIM:601698Reactome:R-HSA-6798695
Alternative Names	Receptor-type tyrosine-protein phosphatase N2 R-PTP-N2
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) , Required to maintain normal levels of renin expression and renin release , May regulate catalytic active protein-tyrosine phosphatases such as PTPRA through dimerization , Has phosphatidylinositol phosphatase activity
Cellular Localization	Cytoplasmic vesicle, secretory vesicle membrane,
Post-translational Modifications	Subject to proteolytic cleavage at multiple sites,