

ICA 512/PTPRN Rabbit mAb [S1M5]

Cat NO. :A83554

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H,M,R	Q16849	65 kDa	Rabbit	IgG	100ul,200ul

Applications detail:

Application

WB

1:1000-2000

IHC

1:100

The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human ICA 512/PTPRN

Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

 $\label{products} \textbf{Products are valid for one natural year of receipt.} \textbf{Avoid repeated freeze} \ \textit{I} \ \textbf{thaw cycles}.$

Tissue specificity:

Expression is restricted to neuroendocrine cells. Found in pancreas, brain and pituitary..

Subcellular location:

Membrane,Single-pass type I membrane protein. Cytoplasmic vesicle, secretory vesicle membrane,Single-pass type I membrane protein. Perikaryon. Cell projection, axon. Cell junction, synapse. Cell

Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

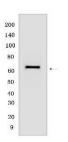
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Plays a role in vesicle-mediated secretory processes (PubMed: 24843546). Required for normal accumulation of secretory vesicles in hippocampus, pituitary and pancreatic islets (By similarity). Required for the accumulation of normal levels of insulin-containing vesicles and preventing their degradation (PubMed:24843546). Plays a role in insulin secretion in response to glucose stimuli (PubMed:24843546). Required for normal accumulation of the neurotransmitters norepinephrine, dopamine and serotonin in the brain (By similarity). 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). Seems to lack intrinsic enzyme activity (By similarity). May regulate catalytic active protein-tyrosine phosphatases such as PTPRA through dimerization (By similarity).., [ICA512-transmembrane fragment]: ICA512-TMF regulates dynamics and exocytosis of insulin secretory granules (SGs), binding of ICA512-TMF to SNTB2/beta-2-syntrophin is proposed to restrain SGs mobility and exocytosis by tethering them to the actin cytoskeleton depending on UTRN, the function is inhibited by cytoplasmic ICA512-CFF dimerizing with ICA512-TMF and displacing SNTB2.., [ICA512-cleaved cytosolic fragment]: ICA512-CCF translocated to the nucleus promotes expression of insulin and other granule-related genes, the function implicates binding to and regulating activity of STAT5B probably by preventing its dephosphorylation and potentially by inducing its sumoylation by recruiting PIAS4 (PubMed:15596545, PubMed:16622421, PubMed:18178618). Enhances pancreatic beta-cell proliferation by converging with signaling by STAT5B and STAT3 (PubMed:15596545, PubMed:16622421, PubMed:18178618). ICA512-CCF located in the cytoplasm regulates dynamics and exocytosis of insulin secretory granules (SGs) by dimerizing with ICA512-TMF and displacing SNTB2 thus enhancing SGs mobility and exocytosis (PubMed:18824546, PubMed:20886068)..

Validation Data:

ICA 512/PTPRN Rabbit mAb [S1M5] Images



Western blot (SDS PAGE) analysis of extracts from human hippocampus. Using ICA 512/PTPRNRabbit mAb [S1M5] at dilution of 1:1000 incubated at 4° C over night.

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IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.