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Anti-PTPRN / IA-2 Antibody (clone 8E3)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS17721

Specification

Anti-PTPRN / IA-2 Antibody (clone 8E3) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q16849
Predicted	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a,k**
Calculated MW	**105848**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **E~~N/A**

Anti-PTPRN / IA-2 Antibody (clone 8E3) - Additional Information

Gene ID 5798

Alias Symbol **PTPRN**

Other Names
PTPRN, ICA512, IA2, ICA 512, Islet antigen 2, Islet cell antigen 2, Islet cell autoantigen 3, IA-2, Ia-2 antigen, ICA3, PTP-NP-2, PTP IA-2, R-PTP-N, IA-2/PTP, Islet cell antigen 512

Target/Specificity
Human PTPRN

Reconstitution & Storage
Protein A purified

Precautions
Anti-PTPRN / IA-2 Antibody (clone 8E3) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-PTPRN / IA-2 Antibody (clone 8E3) - Protein Information

Name PTPRN

Synonyms ICA3, ICA512

Function
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:<a href="http://www.uniprot.org/citations/24843546"

target="_blank">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).

Cellular Location
Membrane {ECO:0000250|UniProtKB:Q63259}; Single- pass type I membrane protein {ECO:0000250|UniProtKB:Q63259} Cytoplasmic vesicle, secretory vesicle membrane; Single-pass type I membrane protein. Perikaryon {ECO:0000250|UniProtKB:Q63259}. Cell projection, axon {ECO:0000250|UniProtKB:Q63259}. Synapse {ECO:0000250|UniProtKB:Q63259}. Cell membrane; Single-pass type I membrane protein {ECO:0000250|UniProtKB:Q63259}. Endosome {ECO:0000250|UniProtKB:Q63259}. Note=Detected on neuronal secretory vesicles, but not on synaptic vesicles. Colocalizes with insulin- containing secretory granules (PubMed:25561468). Primarily detected on secretory vesicle membranes. 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 via the Golgi apparatus membranes. {ECO:0000250|UniProtKB:Q63259, ECO:0000269|PubMed:25561468} [ICA512-cleaved cytosolic fragment]: Nucleus

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

Anti-PTPRN / IA-2 Antibody (clone 8E3) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PTPRN / IA-2 Antibody (clone 8E3) - Images