

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

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: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 Cytometry](#)
- [Cell Culture](#)

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