

Recombinant Human IA2

Catalog No: CH80

Description	Recombinant Human Islet Cell Antigen 2/Protein Tyrosine Phosphatase Receptor-type N is produced by our E.coli expression system and the target gene encoding Arg576-Gln950 is expressed with a 6His tag at the N- terminus.
Source	E. coli
Alternative name	Receptor-type tyrosine-protein phosphatase-like N; R-PTP-N; Islet cell antigen 512; ICA 512; Islet cell autoantigen 3; PTP IA-2; PTPRN; ICA3; ICA512
Accession No.	Q16849
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris,150mM NaCl,pH8.0.
Quality Control	Purity: Greater than 90% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

Amino Acid Sequence

MGSSHHHHHHSSGLVPRGSHMRQQDKERLAALGPEGAHGDTTFEYQDLCRQHMA TKSLFNRAEGPP
 EPSRVSSVSSQFSDAAQASPSSHSSTPSWC EEP AQANMDISTGHMILAYMEDHLRNRDRLAKEWQAL
 CAYQAEPNTCATAQGEGNIKKNRHPDFLPYDHARIKLKVESSPSRSDYINASPIIEHDPRMPAYIATQGP
 LSHTIADFWMVWESGCTVIVMLTPLVEDGVKQCDRYWPDEGASLYHVYEVNLVSEHIWCEDFLVRSF
 YLKNVQTQETRTL TQFHFLSWPAEGTPASTRPLLD FRRKVNKCYRGRSCPIIVHCSDGAGRTGTYLID
 MVLNRMAGVK EIDIAATLEHVRDQRPGLVRSKDQFEFALTAVAE EVNAILKALPQ

Background

Receptor-type tyrosine-protein phosphatase-like N (PTPRN) belongs to the protein-tyrosine phosphatase family and receptor class 8 subfamily. PTPRN contains 1 tyrosine-protein phosphatase domain, is expressed in neuroendocrine cells only. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. It implicated in neuroendocrine secretory processes. It may be involved in processes specific for neurosecretory granules, such as their biogenesis, trafficking or regulated exocytosis or may have a general role in neuroendocrine functions. It seems to lack intrinsic enzyme activity, may play a role in the regulation of secretory granules via its interaction with SNTB2. This PTP was found to be an autoantigen that is reactive with insulin-dependent diabetes mellitus (IDDM) patient sera, and thus may be a potential target of autoimmunity in diabetes mellitus.

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