Data Sheet (Cat.No.TMPJ-01139)

IA2 Protein, Human, Recombinant (aa 576-950, His)

General Information

Synonyms:	Islet cell antigen 512;Islet cell autoantigen 3;ICA3;Receptor-type tyrosine-protein phosphatase-like N;R-PTP-N;ICA512;PTPRN;PTP IA-2;ICA 512
Protein Construction:	Arg576-Gln950
Species:	Human
Expression Host:	E. coli
Accession:	Q16849
Molecular Weight:	50 KDa (reducing condition)
AA Sequence:	Arg576-Gln950

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Supplied as a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl, pH 8.0.

Preparation and Storage

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

Shipping with blue ice.

Protein 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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