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

Catalog No. PDEH100005

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	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
Species	Human
Expression Host	E.coli
Sequence	Arg576-Gln950
Accession	Q16849
Calculated Molecular Weight	44.6 kDa
Observed molecular weight	50 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4.5% trehalose, 5% mannitol, 0.01% Tween 80. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis

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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