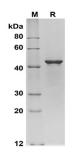
Recombinant Human IA2/PTPRN Protein (aa 576-950, His Tag)

Catalog Number: PDEH100668

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

Description	
Species	Human
Source	E.coli-derived Human IA2 protein Arg576-Gln950, with an N-terminal His
Calculated MW	44.6 kDa
Observed MW	45 kDa
Accession	Q16849
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
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.

Data



SDS-PAGE analysis of Human IA2/PTPRN proteins, 2µg/lane of Recombinant Human IA2/PTPRN proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 45 KD.

Background

For Research Use Only

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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.