
Product Name: PTP IA-2 β Rabbit Polyclonal Antibody**Catalog #: APRab16664**

For research use only.

Summary

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|----------------------|---|
| Description | Rabbit polyclonal Antibody |
| Host | Rabbit |
| Application | WB,IHC,ELISA |
| Reactivity | Human,Mouse,Rat |
| Conjugation | Unconjugated |
| Modification | Unmodified |
| Isotype | IgG |
| Clonality | Polyclonal |
| Form | Liquid |
| Concentration | 1mg/ml |
| Storage | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| Shipping | Ice bags |
| Buffer | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| Purification | Affinity purification |

Application

| | |
|-------------------------|---|
| Dilution Ratio | WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000 |
| Molecular Weight | 111kDa |

Antigen Information

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|--------------------------|--|
| Gene Name | PTPRN2 |
| Alternative Names | PTPRN2; KIAA0387; Receptor-type tyrosine-protein phosphatase N2; R-PTP-N2; Islet cell autoantigen-related protein; IAR; ICAAR; Phogrin |
| Gene ID | 5799.0 |
| SwissProt ID | Q92932 |
| Immunogen | The antiserum was produced against synthesized peptide derived from human PTPRN2. AA range:206-255 |

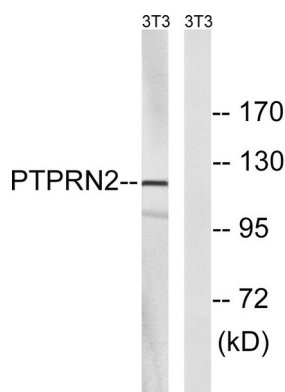
Background

This gene encodes a protein with sequence similarity to receptor-like protein tyrosine phosphatases. However, tyrosine phosphatase activity has not been experimentally validated for this protein. Studies of the rat ortholog suggest that the encoded protein may instead function as a phosphatidylinositol phosphatase with the ability to dephosphorylate phosphatidylinositol 3-phosphate and phosphatidylinositol 4,5-diphosphate, and this function may be involved in the regulation of insulin secretion. This protein has been identified as an autoantigen in insulin-dependent diabetes mellitus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2015],catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,disease:Autoantigen in insulin-dependent diabetes mellitus (IDDM).,domain:The cytoplasmic domain appears to contain the autoantigenic epitopes.,function:Implicated in development of nervous system and pancreatic endocrine cells.,PTM:Appears to undergo multiple proteolytic cleavage at consecutive basic residues.,similarity:Belongs to the protein-tyrosine phosphatase family. Receptor class 8 subfamily.,similarity:Contains 1 tyrosine-protein phosphatase domain.,tissue specificity:Highest levels in brain and pancreas. Lower levels in trachea, prostate, stomach and spinal chord.,

Research Area

Type I diabetes mellitus;

Image Data



Western blot analysis of lysates from NIH/3T3 cells, using PTPRN2 Antibody. The lane on the right is blocked with the synthesized peptide.