

For Research Use Only

# IA-2/PTPRN Polyclonal antibody

Catalog Number: 10584-1-AP **4 Publications**



## Basic Information

<b>Catalog Number:</b> 10584-1-AP	<b>GenBank Accession Number:</b> BC007713	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 500 µg/ml	<b>GeneID (NCBI):</b> 5798	<b>Recommended Dilutions:</b> WB 1:500-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q16849	IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate
<b>Isotype:</b> IgG	<b>Full Name:</b> protein tyrosine phosphatase, receptor type, N	IHC 1:20-1:200
<b>Immunogen Catalog Number:</b> AG0923	<b>Calculated MW:</b> 105 kDa	IF 1:50-1:500
	<b>Observed MW:</b> 60-65 kDa, 106-115 kDa	

## Applications

<b>Tested Applications:</b> FC, IF-P, IHC, IP, WB, ELISA	<b>Positive Controls:</b> WB: mouse brain tissue, HEK-293 cells, mouse kidney tissue, rat brain tissue
<b>Cited Applications:</b> WB, IHC	IP: mouse brain tissue,
<b>Species Specificity:</b> human, mouse, rat	IHC: human pancreas cancer tissue,
<b>Cited Species:</b> human	IF: mouse pancreas tissue,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

IA-2/PTPRN is a member of the protein tyrosine phosphatase (PTP) family, which contains a transmembrane region, an intracellular PTP-like domain and an extracellular N-terminus. Experiments found that IA-2/PTPRN localizes to secretory granules and is exclusively expressed in neuroendocrine cells (including pancreatic islets cell). (PMID: 10027571). IA-2/PTPRN was found to be a major autoantigen in insulin-dependent diabetes mellitus and the detection of autoantibodies against IA-2/PTPRN is commonly used as a diabetes diagnosis marker.

## Notable Publications

Author	Pubmed ID	Journal	Application
Chengfeng Merriman	31591269	J Biol Chem	WB
Felipe de Jesus Cortez	33186361	PLoS One	
Guangyan Zhangyuan	29742497	Cell Physiol Biochem	IHC

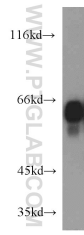
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

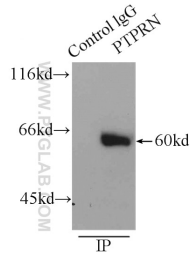
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

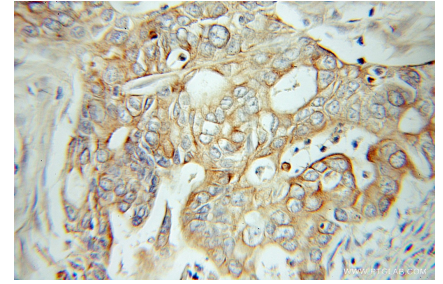
## Selected Validation Data



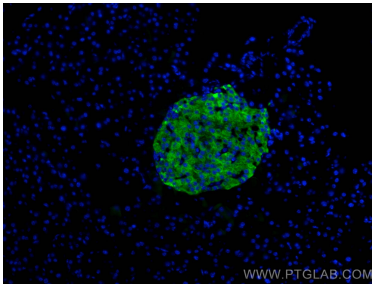
mouse brain tissue were subjected to SDS PAGE followed by western blot with 10584-1-AP (IA-2/PTPRN antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



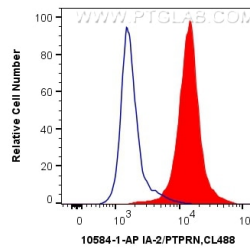
IP result of anti-IA-2/PTPRN (IP:10584-1-AP, 3ug; Detection:10584-1-AP 1:600) with mouse brain tissue lysate 7000ug.



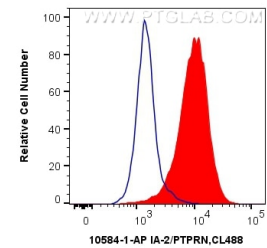
Immunohistochemical analysis of paraffin-embedded human pancreas cancer using 10584-1-AP (IA-2/PTPRN antibody) at dilution of 1:50 (under 10x lens).



Immunofluorescent analysis of (4% PFA) fixed mouse pancreas tissue using IA-2/PTPRN antibody (10584-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human IA-2/PTPRN (10584-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1X10<sup>6</sup> Y79 cells were intracellularly stained with 0.4 ug Anti-Human IA-2/PTPRN (10584-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).