

For Research Use Only

IA-2/PTPRN Polyclonal antibody

Catalog Number: 10584-1-AP

4 Publications



Basic Information

Catalog Number:

10584-1-AP

Size:

150ul, Concentration: 240 ug/ml by Nanodrop and 187 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0923

GenBank Accession Number:

BC007713

GeneID (NCBI):

5798

UNIPROT ID:

Q16849

Full Name:

protein tyrosine phosphatase, receptor type, N

Calculated MW:

105 kDa

Observed MW:

60-65 kDa, 106-115 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:20-1:200

IF-P 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF-P, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human

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

Positive Controls:

WB: mouse brain tissue, HEK-293 cells, mouse kidney tissue, rat brain tissue

IP: mouse brain tissue,

IHC: human pancreas cancer tissue,

IF-P: mouse pancreas tissue,

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

*** 20ul sizes contain 0.1% BSA

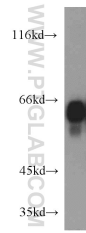
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

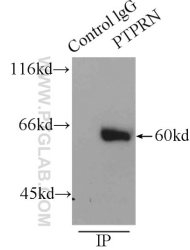
E: proteintech@ptglab.com
W: ptglab.com

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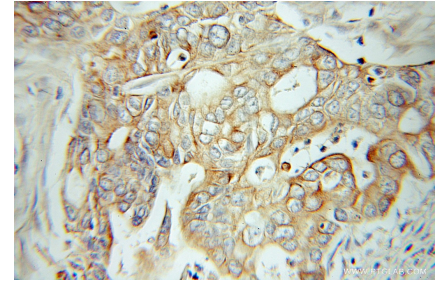
Selected Validation Data



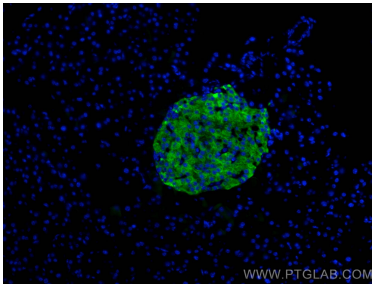
mouse brain tissue were subjected to SDS PAGE followed by western blot with 10584-1-AP (IA-2/PTPRN antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



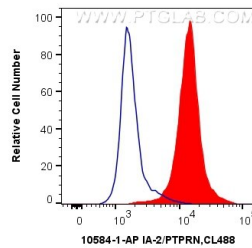
IP result of anti-IA-2/PTPRN (IP:10584-1-AP, 3ug; Detection:10584-1-AP 1:600) with mouse brain tissue lysate 7000ug.



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 Goat Anti-Rabbit IgG(H+L).



1X10⁶ HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human IA-2/PTPRN (10584-1-AP) and CoraLite®488-Conjugated 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).