

For Research Use Only

IA-2/PTPRN Polyclonal antibody

Catalog Number: 10584-1-AP

4 Publications



Basic Information

Catalog Number:

10584-1-AP

Concentration:

600 ug/ml

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

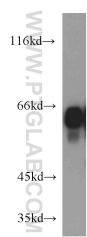
T: 4006900926

E: Proteintech-CN@ptglab.com

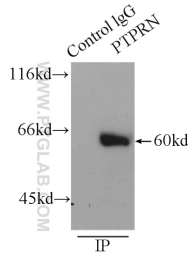
W: ptgcn.com

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

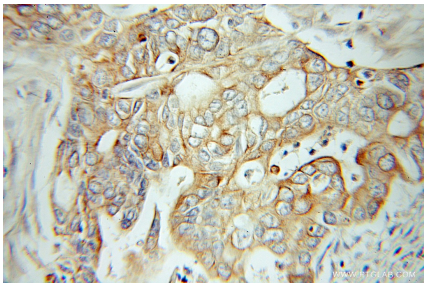
Selected Validation Data



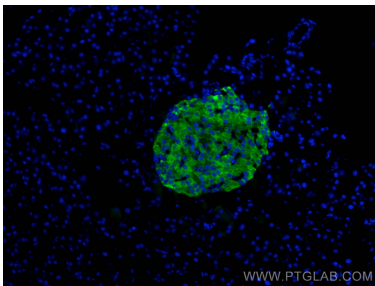
mouse brain tissue were subjected to SDS PAGE followed by western blot with 10584-1-AP (IA-2/PTPRN antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



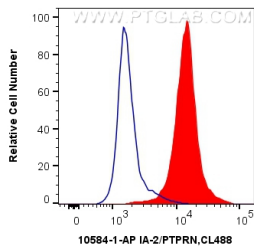
IP result of anti-IA-2/PTPRN (IP:10584-1-AP, 3ug; Detection:10584-1-AP 1:600) with mouse brain tissue lysate 7000ug.



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).



1X10⁶ 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).