## For Research Use Only

## IA-2/PTPRN Polyclonal antibody

Catalog Number: 10584-1-AP

4 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 10584-1-AP BC007713

Size: GeneID (NCBI):

150ul , Concentration: 240  $\mu$ g/ml by 5798 Nanodrop and 187  $\mu$ g/ml by Bradford Full Name:

method using BSA as the standard;

urce: protein tyrosine phosphatase,
protein tyrosine phosphatase,
protein tyrosine phosphatase,

Rabbit Calculated MW:
Isotype: 105 kDa
IgG Observed MW:

Immunogen Catalog Number: 60-65 kDa, 106-115 kDa

AG0923

Purification Method: Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000 IP 0.5-4.0 ug for IP and 1:500-1:1000

for WB IHC 1:20-1:200

**Applications** 

Tested Applications:

FC, IHC, IP, WB, ELISA

**Cited Applications:** 

IHC, WB

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,

**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.

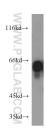
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

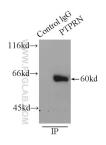
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

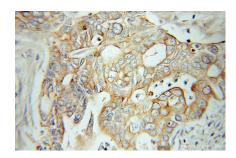
## Selected Validation Data



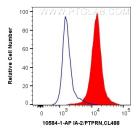
mouse brain tissue were subjected to SDS PAGE followed by western blot with 10584-1-AP (IA-2/PTPRN antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



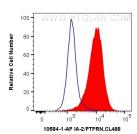
IP Result of anti-IA-2/PTPRN (IP:10584-1-AP, 3ug; Detection:10584-1-AP 1:600) with mouse brain tissue lysate 7000ug.



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



1X10^6 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).



1X10^6 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).