

# ISYNA1 Polyclonal antibody

Catalog Number: 14142-1-AP

5 Publications

## Basic Information

## Catalog Number:

14142-1-AP

## Size:

600 µg/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG5272

## GenBank Accession Number:

BC066902

## GeneID (NCBI):

51477

## UNIPROT ID:

Q9NPH2

## Full Name:

inositol-3-phosphate synthase 1

## Calculated MW:

61 kDa

## Observed MW:

61 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:20-1:200

IF/ICC 1:20-1:200

## Applications

## Tested Applications:

WB, IHC, IF/ICC, ELISA

## Cited Applications:

WB, IF

## Species Specificity:

human, mouse, rat

## Cited Species:

mouse, rat

**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 testis tissue, HepG2 cells, rat testis tissue

IHC : human pancreas cancer tissue,

IF/ICC : HepG2 cells,

## Background Information

Myo-inositol 3-phosphate synthase (ISYNA1/IP synthase) is a rate-limiting enzyme that catalyzes the first step in the biosynthesis of all inositol containing compounds. It converts glucose 6-phosphate to Myo-inositol 3-phosphate. (PMID:21841945). The native enzyme is typically a homotrimer made up of 68-kDa subunits in mammalian cells and a homotetramer in yeast and plant cells. There are three new isoforms of 62, 43, and 16kDa detected suggesting ISYNA1 is a completely different holoenzyme. But only the brain and testis manifest the 68-kDa isoform, whereas the pancreas has a slightly smaller isoform at 67 kDa. The intestine has a completely unique isoform profile comprising 62, 43, 20kDa isoforms (PMID:19188364).

## Notable Publications

Author	Pubmed ID	Journal	Application
Keke Yu	25346504	Alcohol Clin Exp Res	WB, IF
Jian-Yi Dong	33268823	Acta Pharmacol Sin	WB
Jianyi Dong	34504431	Front Pharmacol	WB

## 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

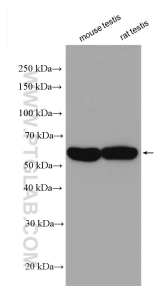
For technical support and original validation data for this product please contact:

T: 4006900926

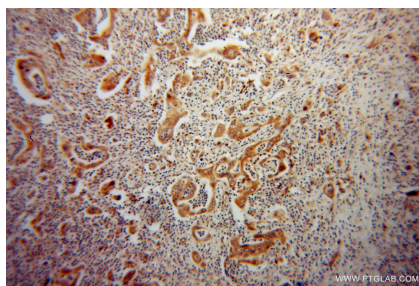
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

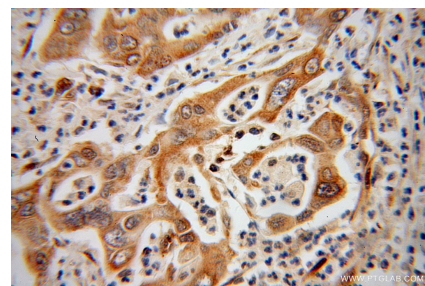
## Selected Validation Data



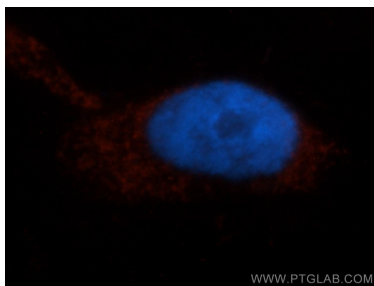
mouse testis tissue were subjected to SDS PAGE followed by western blot with 14142-1-AP (ISYNA1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer using 14142-1-AP (ISYNA1 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer using 14142-1-AP (ISYNA1 antibody) at dilution of 1:100 (under 40x lens).



Immunofluorescent analysis of HepG2 cells, using ISYNA1 antibody 14142-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).