

For Research Use Only

ISYNA1 Polyclonal antibody

Catalog Number: 14142-1-AP **3 Publications**



Basic Information

Catalog Number: 14142-1-AP	GenBank Accession Number: BC066902	Purification Method: Antigen affinity purification
Size: 150UL, Concentration: 233 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 51477	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:20-1:200 IF 1:20-1:200
Source: Rabbit	Full Name: inositol-3-phosphate synthase 1	
Isotype: IgG	Calculated MW: 61 kDa	
Immunogen Catalog Number: AG5272	Observed MW: 61 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB: mouse testis tissue, HepG2 cells IHC: human pancreas cancer tissue, IF: HepG2 cells,
Cited Applications: IF, WB	
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	

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
Cao Senyang S	22508577	Mol Reprod Dev	WB

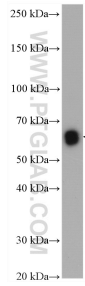
Storage

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

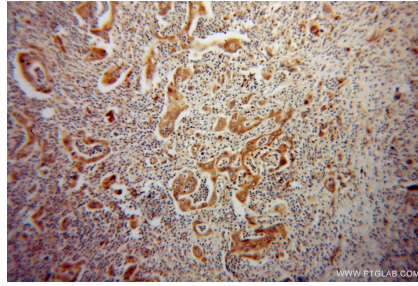
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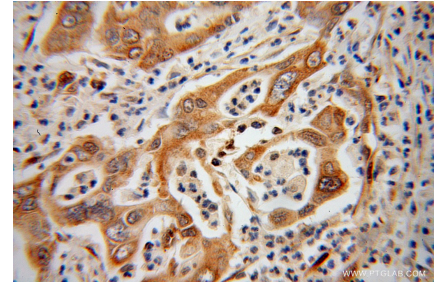
Selected Validation Data



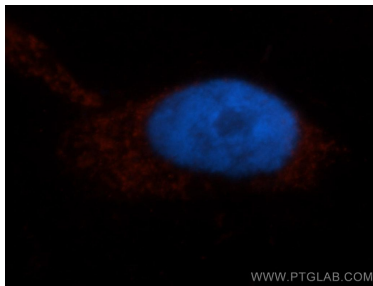
mouse testis tissue were subjected to SDS PAGE followed by western blot with 14142-1-AP (ISYNA1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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).