

ISYNA1 Polyclonal Antibody

Catalog number: 14142-1-AP

Size: 35 µg/150 µl

Source: Rabbit

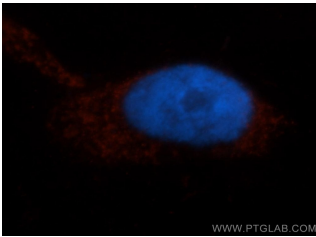
Isotype: IgG

Synonyms:

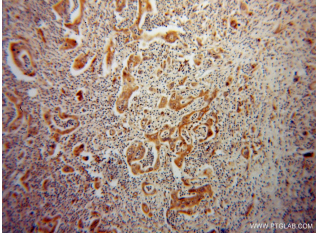
ISYNA1; hINO1, hIPS, Ino1,

INOS, IPS, IPS 1, ISYNA1, MI 1

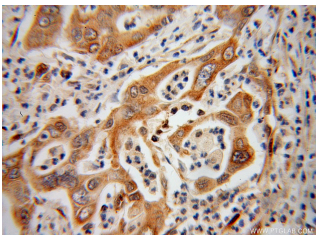
P synthase, MIP synthase



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).



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



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

Background

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).

Applications

Tested applications:	ELISA, WB, IHC, IF
Cited applications:	WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Mouse
Calculated ISYNA1 MW:	61kd
Observed ISYNA1 MW:	61kd
Positive WB detected in	HepG2 cells
Positive IHC detected in	Human pancreas cancer tissue
Positive IF detected in	HepG2 cells
Recommended dilution:	WB: 1:200-1:2000
	IHC: 1:20-1:200
	IF: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag5272
GenBank accession number:	BC066902
Gene ID (NCBI):	51477
Full name:	Inositol-3-phosphate synthase 1

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.