For Research Use Only

ISYNA1 Polyclonal antibody

Catalog Number:14142-1-AP 6 Publications



Basic Information

Catalog Number: GenBank Accession Number:

14142-1-AP BC066902 GeneID (NCBI): Size: 150ul , Concentration: 600 ug/ml by

Nanodrop and 233 ug/ml by Bradford $\,$ UNIPROT ID: method using BSA as the standard; Q9NPH2

Source: Full Name:

Rabbit inositol-3-phosphate synthase 1

Isotype: Calculated MW: 61 kDa Immunogen Catalog Number: Observed MW: AG5272 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

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 homotrimermade 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 isoformat 67 kDa. The intestine has a completely unique isoformprofile comprising 62,43, 20kDa isoforms(PMID:19188364).

Notable Publications

Author	Pubmed ID	Journal	Application
Liang Wang	34594215	Front Pharmacol	
Keke Yu	25346504	Alcohol Clin Exp Res	WB, IF
Jian-Yi Dong	33268823	Acta Pharmacol Sin	WB

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

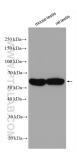
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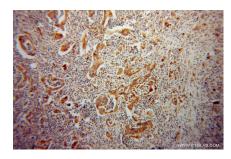
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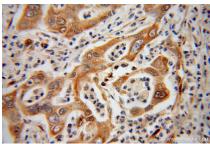
Selected Validation Data



mouse testis tissue were subjected to SDS PAGE followed by western blot with 14142-1-AP (ISVNA1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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



Immunohistochemical analysis of paraffinembedded 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).