

For Research Use Only

PSAT1 Polyclonal antibody

Catalog Number: 10501-1-AP

Featured Product

78 Publications



Basic Information

Catalog Number:

10501-1-AP

Size:

150ul, Concentration: 800 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0776

GenBank Accession Number:

BC004863

GeneID (NCBI):

29968

UNIPROT ID:

Q9Y617

Full Name:

phosphoserine aminotransferase 1

Calculated MW:

40 kDa

Observed MW:

37-40 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:800

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, CoIP

Species Specificity:

human, rat

Cited Species:

human, mouse, pig

Positive Controls:

WB : HeLa cells, Jurkat cells, HEK-293 cells, HepG2 cells, K-562 cells, rat brain tissue

IP : HeLa cells,

IHC : human pancreas cancer tissue, human colon cancer tissue

IF/ICC : HepG2 cells,

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

PSAT1, also named PSA and PSAT, belongs to the class-V pyridoxal-phosphate-dependent aminotransferase family and SerC subfamily. It catalyzes the reversible conversion of 3-phosphohydroxypyruvate to phosphoserine and of 3-hydroxy-2-oxo-4-phosphonooxybutanoate to phosphohydroxythreonine. PSAT1 represents a new interesting target for CRC therapy. (PMID:18221502) It may be implicated in altered serine metabolism and schizophrenia spectrum conditions. (PMID:20955740)

Notable Publications

Author	Pubmed ID	Journal	Application
Shengya Tian	31562192	Life Sci Alliance	WB
R L Yang	32940141	J Dent Res	WB,IF
Brandon J Gheller	33122122	Mol Metab	WB

Storage

Storage:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

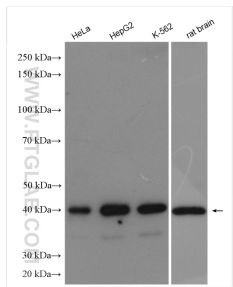
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

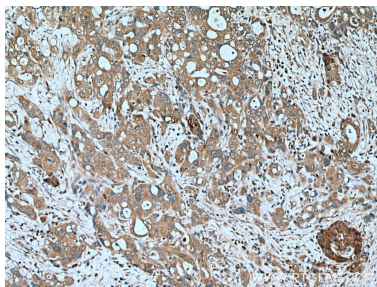
E: proteintech@ptglab.com
W: ptglab.com

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

Selected Validation Data



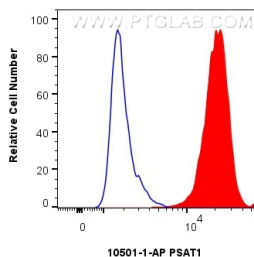
Various lysates were subjected to SDS PAGE followed by western blot with 10501-1-AP (PSAT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



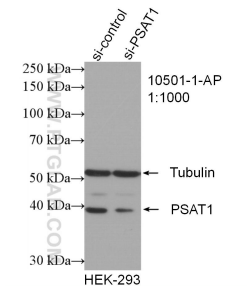
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 10501-1-AP (PSAT1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



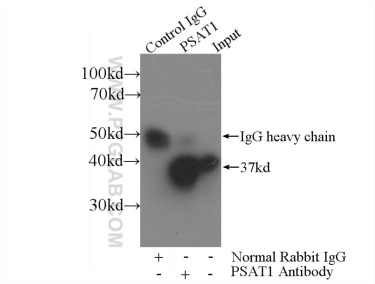
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PSAT1 antibody (10501-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).



1x10⁶ HepG2 cells were intracellularly stained with 0.25 ug PSAT1 Polyclonal antibody (10501-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of PSAT1 antibody (10501-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PSAT1 transfected HEK-293 cells.



IP result of anti-PSAT1 (IP:10501-1-AP, 3ug; Detection:10501-1-AP 1:300) with HeLa cells lysate 2480ug.