## For Research Use Only

## PSAT1 Polyclonal antibody

Catalog Number: 10501-1-AP

**Featured Product** 

55 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 10501-1-AP BC004863

ze: Genel D (NCBI):

150ul , Concentration: 800 µg/ml by 29968 Nanodrop; Full Name:

Source: phosphoserine aminotransferase 1

Rabbit Calculated MW:
Isotype: 40 kDa
IgG Observed MW:
Immunogen Catalog Number: 37-40 kDa

AG0776

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 1:50-1:500

**Applications** 

**Tested Applications:** 

IF, IHC, IP, WB, ELISA Cited Applications: CoIP, IF, IHC, WB Species Specificity:

human, rat

Cited Species:
human, mouse, pig

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: 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: HepG2 cells,

**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.

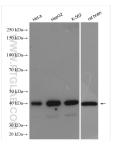
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

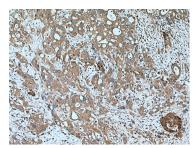
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

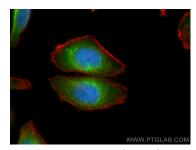
## **Selected Validation Data**



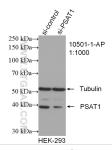
Various lysates were subjected to SDS PAGE followed by western blot with 10501-1-AP (PSAT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



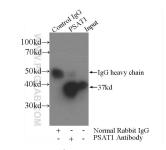
Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 10501-1-AP (PSAT1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PSAT1 antibody (10501-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



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.