For Research Use Only

PSAT1 Polyclonal antibody

Catalog Number: 20180-1-AP

Featured Product

9 Publications



Basic Information

Catalog Number:

20180-1-AP

BC001618

Size:

240 µg/ml

29968

Source:

Rabbit

Q9Y617

Isotype:

GenBank Accession Number:

BC001618

GeneID (NCBI):

29968

UNIPROT ID:

Q9Y617

Full Name:

gG phosphoserine aminotransferase 1

Immunogen Catalog Number:Calculated MW:AG14044370 aa, 40 kDaObserved MW:

Observed MW: 37-40 kDa

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:1000-1:8000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF/ICC 1:200-1:800

Applications

Tested Applications: WB, IHC, IF/ICC, IP, ELISA Cited Applications:

WB, IHC

Species Specificity: human, mouse, rat Cited Species:

human, mouse

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, HEK-293 cells, A549 cells, K-562 cells, mouse brain tissue. rat brain tissue

P: HeLa cells,

IHC: human lung cancer tissue, human breast cancer

tissue

IF/ICC: HepG2 cells,

Background Information

PSAT1, also named as 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
Ji Wang	34544857	Proc Natl Acad Sci U S A	WB
Katherine Sellers	31114017	Br J Cancer	WB
Margaret E Torrence	33646118	Elife	WB

Storage

Storage:

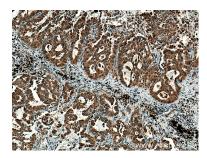
Store at -20°C. Stable for one year after shipment.

Storage Buffer

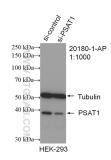
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

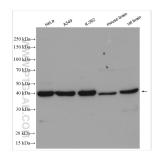
Selected Validation Data



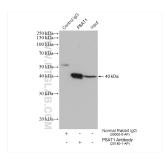
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 20180-1-AP (PSAT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



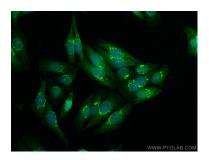
WB result of PSAT1 antibody (20180-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PSAT1 transfected HEK-293 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 20180-1-AP (PSAT1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



IP result of anti-PSAT1 (IP:20180-1-AP, 4ug; Detection:20180-1-AP 1:2000) with HeLa cells lysate 2520 ug.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PSAT1 antibody (20180-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).