

Basic Information

Product Name	Anti-PSAT1 Antibody
Gene Name	PSAT1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ICC/IF, FCM, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human PSAT1 recombinant protein (Position: M1-K363).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	40 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000

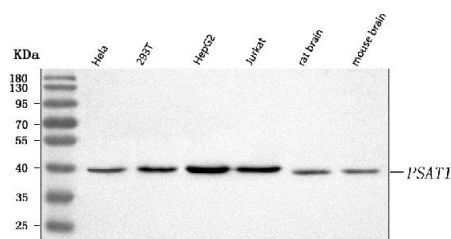
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Phosphoserine aminotransferase (PSA), also known as phosphohydroxythreonine aminotransferase (PSAT), is an enzyme that in humans is encoded by the PSAT1 gene. This gene encodes a member of the class-V pyridoxal-phosphate-dependent aminotransferase family. The encoded protein is a phosphoserine aminotransferase and decreased expression may be associated with schizophrenia. Mutations in this gene are also associated with phosphoserine aminotransferase deficiency. Alternative splicing results in multiple transcript variants.

Selected Validation Data



Western blot analysis of anti-PSAT1 antibody (A06277). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

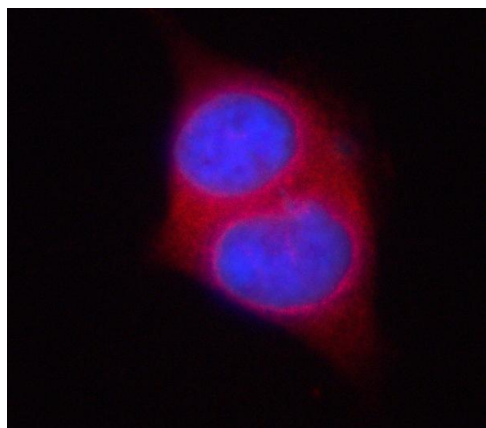
Lane 4: human Jurkat whole cell lysates,

Lane 5: rat brain tissue lysates,

Lane 6: mouse brain tissue lysates.

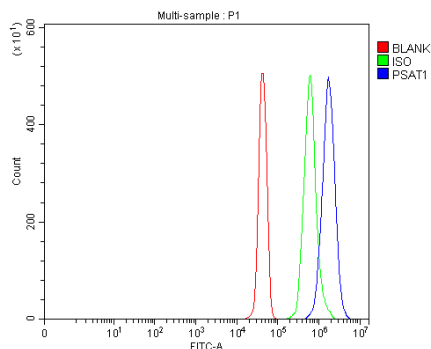
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-PSAT1 antigen affinity purified polyclonal antibody (A06277) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PSAT1 at approximately 40 kDa. The expected band size for PSAT1 is at 37-45 kDa.



ICC/IF analysis of PSAT1 using anti-PSAT1 antibody (A06277).

PSAT1 was detected in an immunocytochemical section of PC-3 cells. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of Jurkat cells using anti-PSAT1 antibody (A06277).

Overlay histogram showing Jurkat cells stained with A06277 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer.

The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PSAT1 Antibody (A06277, 1:100).

Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.