10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PSAT1 Picoband Antibody

Catalog # ABO11704

Specification

Anti-PSAT1 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9Y617
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Phosphoserine aminotransferase(PSAT1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PSAT1 Picoband Antibody - Additional Information

Gene ID 29968

Other Names
Phosphoserine aminotransferase, 2.6.1.52, Phosphohydroxythreonine aminotransferase, PSAT, PSAT1, PSA

Calculated MW
40423 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Rat

Tissue Specificity
Expressed at high levels in the brain, liver, kidney and pancreas, and very weakly expressed in the thymus, prostate, testis and colon.

Protein Name
Phosphoserine aminotransferase

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human PSAT1 recombinant protein (Position: Q276-L370). Human PSAT1 shares 90.5% amino acid (aa) sequence identity with mouse PSAT1.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-PSAT1 Picoband Antibody - Protein Information

Name PSAT1 (HGNC:19129)

Synonyms PSA

Function
Involved in L-serine biosynthesis via the phosphorylated pathway, a three-step pathway converting the glycolytic intermediate 3- phospho-D-glycerate into L-serine. Catalyzes the second step, that is the pyridoxal 5'-phosphate-dependent transamination of 3- phosphohydroxypyruvate and L-glutamate to O-phosphoserine (OPS) and alpha-ketoglutarate.

Tissue Location
Expressed at high levels in the brain, liver, kidney and pancreas, and very weakly expressed in the thymus, prostate, testis and colon.

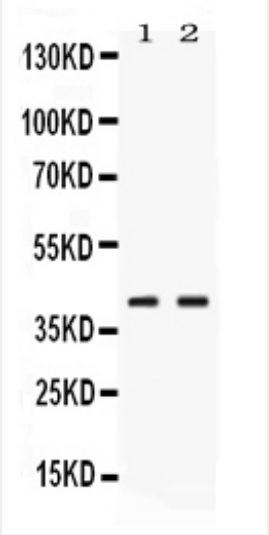
Anti-PSAT1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

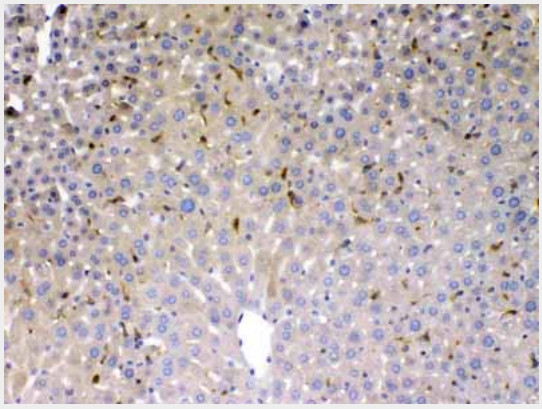
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PSAT1 Picoband Antibody - Images

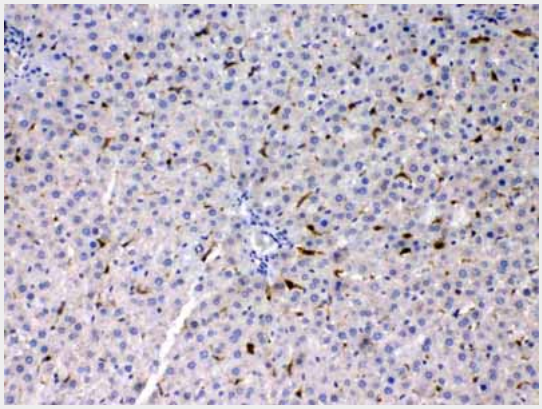
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of PSAT1 expression in rat pancreas extract (lane 1) and HELA whole cell lysates (lane 2). PSAT1 at 40KD was detected using rabbit anti- PSAT1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11704) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .

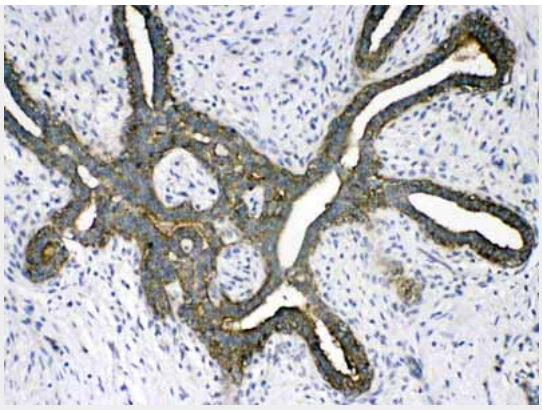


PSAT1 was detected in paraffin-embedded sections of mouse liver tissues using rabbit anti-PSAT1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11704) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .



PSAT1 was detected in paraffin-embedded sections of rat liver tissues using rabbit anti- PSAT1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11704) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



PSAT1 was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- PSAT1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11704) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-PSAT1 Picoband Antibody - Background

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.