

Mouse ASS1 Monoclonal Antibody | anti-ASS1 antibody

Anti-ASS1 Antibody (monoclonal, 5I5)

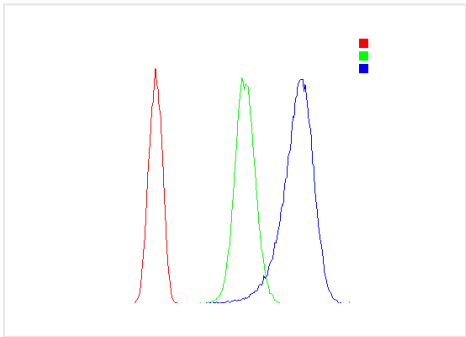
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19369	Mouse	Human, Mouse, Rat, Monkey	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

ASS1; Monoclonal Antibody; Anti-ASS1 Antibody (monoclonal; 5I5); Argininosuccinate synthase; Citrulline--aspartate ligase; ASS; argininosuccinate synthase 1; anti-ASS1 antibody

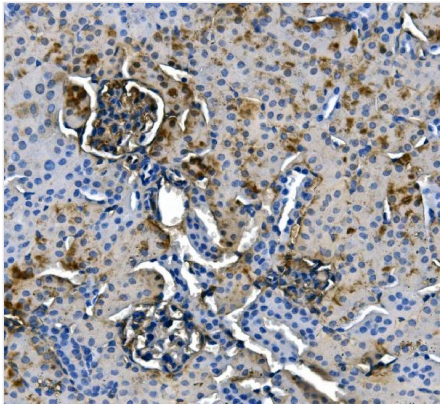
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	5I5
Specificity	Mouse IgG monoclonal antibody for ASS1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-ASS1 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Application Notes	WB: 0.25-0.5ug/ml Human, Mouse, Rat, Monkey IHC-P: 2-5ug/ml Human, Mouse, Rat ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human
Immunogen	E Coli-derived human ASS1 recombinant protein (Position: S3-S365).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



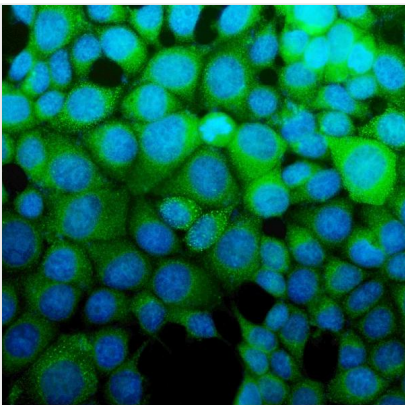
FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of SiHa cells using anti- ASS1 antibody (AAA19369).Overlay histogram showing SiHa cells stained with AAA19369 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-ASS1 Antibody (AAA19369, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



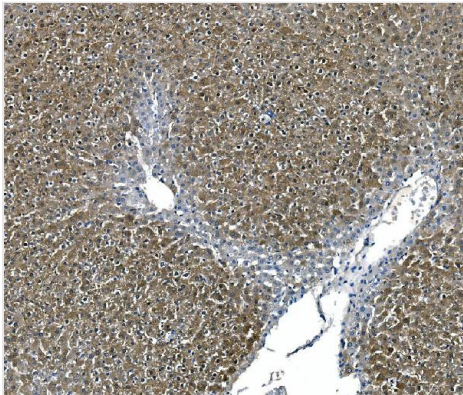
IHC (Immunohistochemistry)

Figure 6. IHC analysis of ASS1 using anti-ASS1 antibody (AAA19369).ASS1 was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-ASS1 Antibody (AAA19369) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



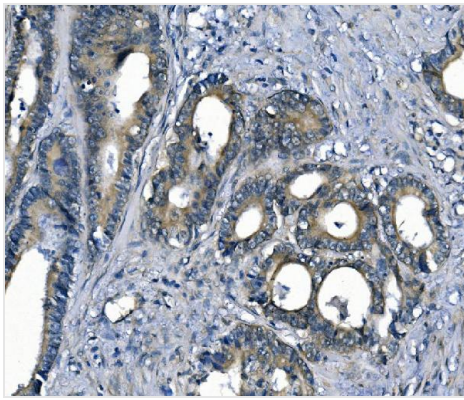
IF (Immunofluorescence)

Figure 7. IF analysis of ASS1 using anti- ASS1 antibody (AAA19369).ASS1 was detected in immunocytochemical section of MCF-7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL mouse anti- ASS1 Antibody (AAA19369) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



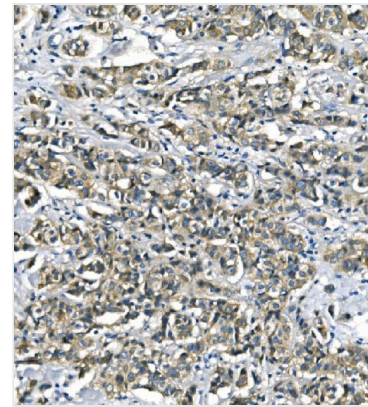
IHC (Immunohistochemistry)

Figure 5. IHC analysis of ASS1 using anti-ASS1 antibody (AAA19369).ASS1 was detected in paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-ASS1 Antibody (AAA19369) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 4. IHC analysis of ASS1 using anti-ASS1 antibody (AAA19369).ASS1 was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-ASS1 Antibody (AAA19369) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of ASS1 using anti-ASS1 antibody (AAA19369).ASS1 was detected in paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-ASS1 Antibody (AAA19369) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-ASS1 antibody	Argininosuccinate synthetase is an enzyme that in humans is encoded by the ASS1 gene. It is mapped to 9q34. 11. The protein encoded by this gene catalyzes the penultimate step of the arginine biosynthetic pathway. There are approximately 10 to 14 copies of this gene including the pseudogenes scattered across the human genome, among which the one located on chromosome 9 appears to be the only functional gene for argininosuccinate synthetase. Mutations in the chromosome 9 copy of this gene cause citrullinemia. Two transcript variants encoding the same protein have been found for this gene.
References	- Engel, K., Hohne, W., Haberle, J. Mutations and polymorphisms in the human argininosuccinate synthetase (ASS1) gene. Hum. Mutat. 30: 300-307, 2009. - Rabinovich, S., Adler, L., Yizhak, K., Sarver, A., Silberman, A., Agron, S., Stettner, N., Sun, Q., Brandis, A., Helbling, D., Korman, S., Itzkovitz, S., Dimmock, D., Ulitsky, I., Nagamani, S. C. S., Ruppig, E., Erez, A. Diversion of aspartate in ASS1-deficient tumours fosters de novo pyrimidine synthesis. Nature 527: 379-383, 2015. - Sase, M., Kobayashi, K., Imamura, Y., Saheki, T., Nakano, K., Miura, S., Mori, M. Level of translatable messenger RNA coding for argininosuccinate synthetase in the liver of the patients with quantitative-type citrullinemia. Hum. Genet. 69: 130-134, 1985.

NCBI AND UNIPROT INFORMATION

NCBI GI #	53759107
NCBI GeneID	445
NCBI Accession #	NP_000041.2
NCBI GenBank Nucleotide #	NM_000050.4
UniProt Accession #	P00966 ; Q6LDL2 ; Q86UZ0 ; Q96GT4
Molecular Weight	46,530 Da
NCBI Official Full Name	argininosuccinate synthase
NCBI Official Synonym Full Names	argininosuccinate synthase 1
NCBI Official Symbol	ASS1
NCBI Official Synonym Symbols	ASS; CTLN1
NCBI Protein Information	argininosuccinate synthase; argininosuccinate synthetase 1; citrulline--aspartate ligase; citrulline-aspartate ligase

UniProt Protein Name	Argininosuccinate synthase
UniProt Gene Name	ASS1
UniProt Synonym Gene Names	ASS
UniProt Entry Name	ASSY_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/ass1-antibody-clone-5i5-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19369>