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

ASS1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1668a

Specification

ASS1 Antibody - Product Information

Application	**E, WB, IF, FC**
Primary Accession	P00966
Reactivity	**Human, Mouse, Rat, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**47kDa KDa**

Description
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 ASS cause citrullinemia. Two transcript variants encoding the same protein have been found for this gene.

Immunogen
Purified recombinant fragment of human ASS1 expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

ASS1 Antibody - Additional Information

Gene ID 445

Other Names
Argininosuccinate synthase, 6.3.4.5, Citrulline--aspartate ligase, ASS1, ASS

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ASS1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ASS1 Antibody - Protein Information

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Name ASS1 (HGNC:758)

Function
One of the enzymes of the urea cycle, the metabolic pathway transforming neurotoxic amonia produced by protein catabolism into inocuous urea in the liver of ureotelic animals. Catalyzes the formation of arginosuccinate from aspartate, citrulline and ATP and together with ASL it is responsible for the biosynthesis of arginine in most body tissues.

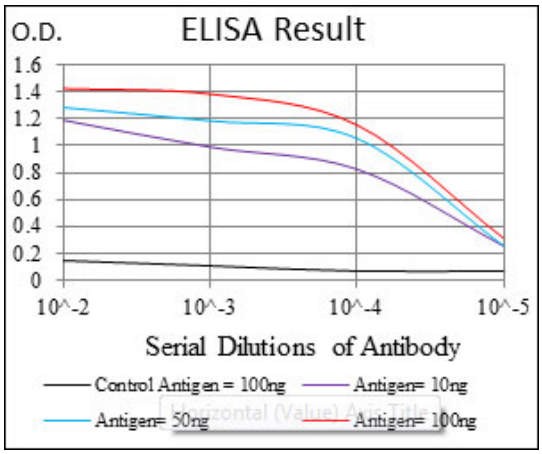
Cellular Location
Cytoplasm, cytosol

Tissue Location
Expressed in adult liver.

ASS1 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



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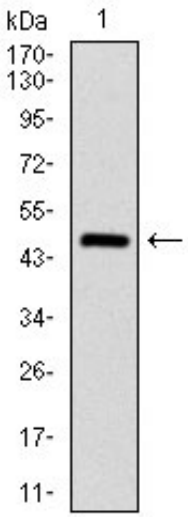


Figure 1: Western blot analysis using ASS1 mAb against human ASS1 (AA: 40-236) recombinant protein. (Expected MW is 47 kDa)

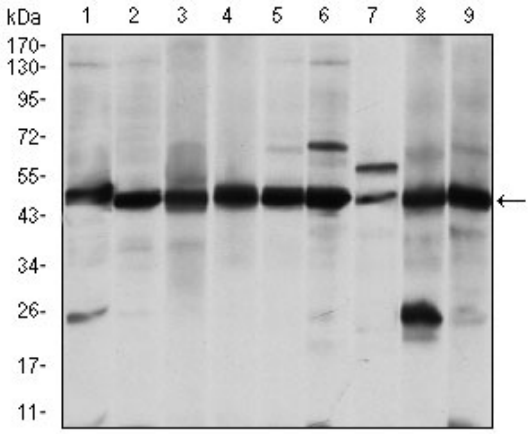


Figure 2: Western blot analysis using ASS1 mouse mAb against A431 (1), RAJI (2), L1210 (3), MOLT4 (4), Jurkat (5), A549 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

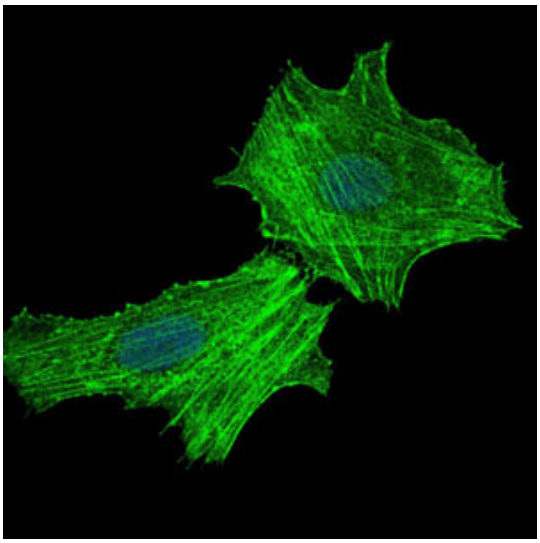


Figure 3: Immunofluorescence analysis of Hela cells using ASS1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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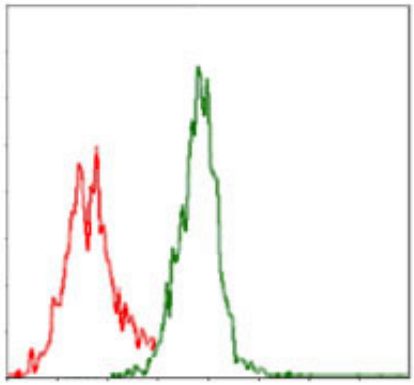


Figure 4: Flow cytometric analysis of Jurkat cells using ASS1 mouse mAb (green) and negative control (red).

ASS1 Antibody - References

1. Int J Cancer. 2009 Sep 15;125(6):1454-63. 2. Clin Biochem. 2009 Jul;42(10-11):1166-8.