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

Product Information

Application	WB, FC, ICC, E
Primary Accession	P00966
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	2B10
Isotype	IgG1
Calculated MW	46530
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

Additional Information

Gene ID	445
Other Names	Argininosuccinate synthase, 6.3.4.5, Citrulline--aspartate ligase, ASS1, ASS
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
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.

Protein Information

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.

References

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

Images

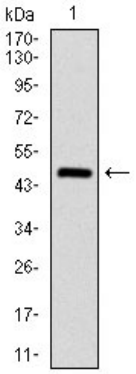


Figure 1: Western blot analysis using ASS1 mAb against human ASS1 (AA: 40-236) recombinant protein. (Expected MW is 47 kDa)

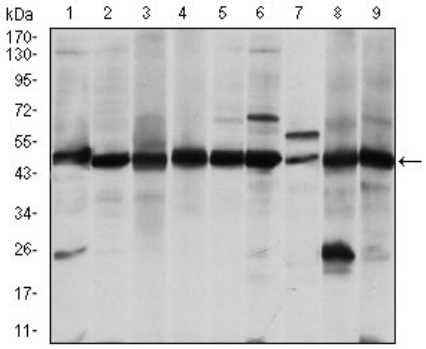


Figure 2: Western blot analysis using ASS1 mouse mAb against A431 (1), RAJI (2), L1210 (3), MOLT4 (4), Jurkat (5), A549 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

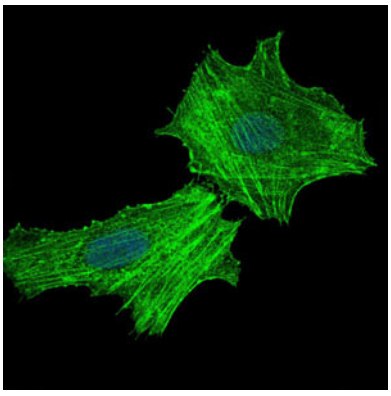
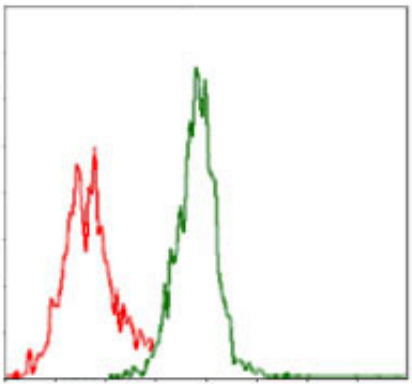


Figure 3: Immunofluorescence analysis of Hela cells using ASS1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.