

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 (<u>HGNC:758</u>)

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

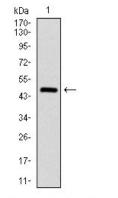


Figure 1: Western blot analysis using ASS1 mAb against human ASS1 (AA: 40-236) recombinant protein. (Expected MW is 47 kDa)

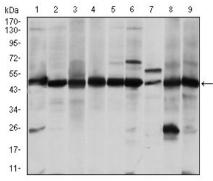


Figure 2: Western blot analysis using ASS1 mouse mAb against A431 (1), RAJI (2), L1210 (3), MOLT4 (4), Jurkat (5), A549 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

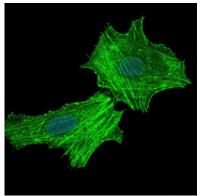
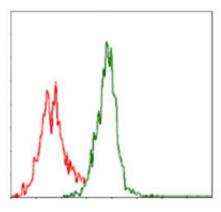


Figure 3: Immunofluorescence analysis of Hela cells using ASS1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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



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