

**ASS1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1668a**

**Specification**

**ASS1 Antibody - Product Information**

Application	E, WB, IF, FC
Primary Accession	<a href="#">P00966</a>
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. <br />

**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**

Name ASS1 ([HGNC:758](#))

### Function

One of the enzymes of the urea cycle, the metabolic pathway transforming neurotoxic ammonia produced by protein catabolism into innocuous 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

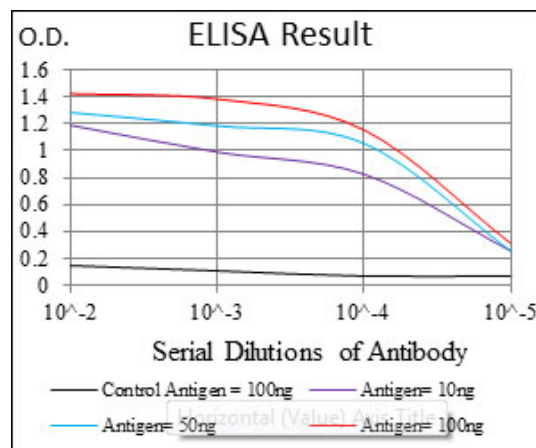
### Tissue Location

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 Cytometry](#)
- [Cell Culture](#)



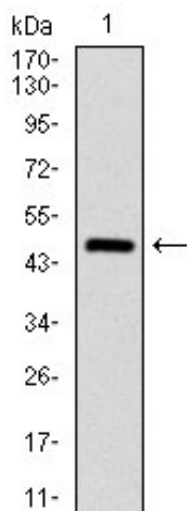


Figure 1: Western blot analysis using ASS1 mAb against human ASS1 (AA: 40-236) recombinant protein. (Expected MW is 47 kDa)

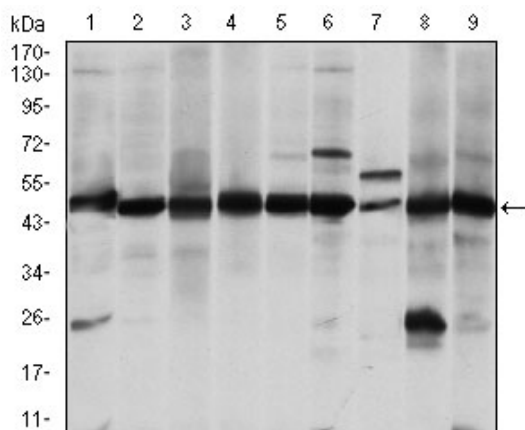


Figure 2: Western blot analysis using ASS1 mouse mAb against A431 (1), RAJI (2), L1210 (3), MOLT4 (4), Jurkat (5), A549 (6), NIH/3T3 (7), PC-12 (8) and Cos7 (9) cell lysate.

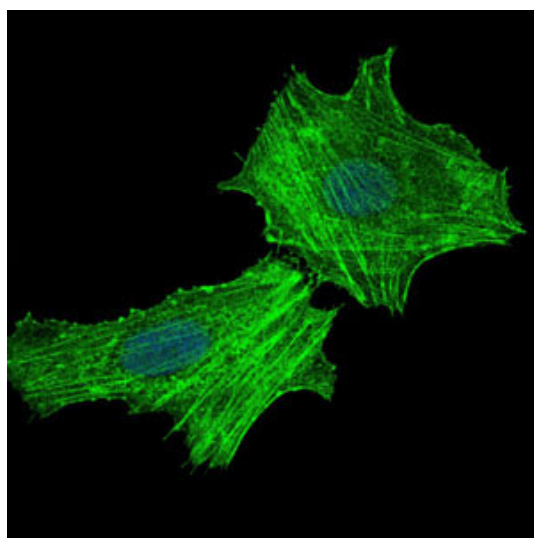


Figure 3: Immunofluorescence analysis of HeLa cells using ASS1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

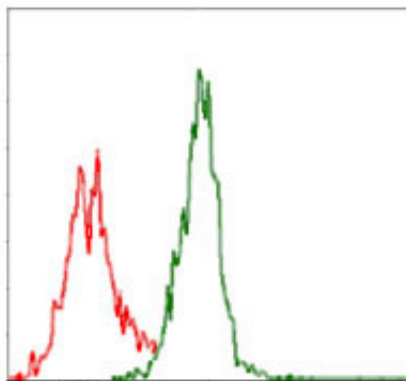


Figure 4: Flow cytometric analysis of Jurkat cells using ASS1 mouse mAb (green) and negative control (red).

### ASS1 Antibody - References

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