

**ASS1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12606b**

**Specification**

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**ASS1 Antibody (C-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P00966</a>
Other Accession	<a href="#">P09034</a> , <a href="#">P16460</a> , <a href="#">Q5ZJ23</a> , <a href="#">P14568</a> , <a href="#">NP_446464.1</a> , <a href="#">NP_000041.2</a>
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	46530
Antigen Region	281-310

**ASS1 Antibody (C-term) - Additional Information**

**Gene ID** 445

**Other Names**

Argininosuccinate synthase, Citrulline--aspartate ligase, ASS1, ASS

**Target/Specificity**

This ASS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 281-310 amino acids from the C-terminal region of human ASS1.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

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

**Precautions**

ASS1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ASS1 Antibody (C-term) - 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 ASS2 it is responsible for the biosynthesis of arginine in most body tissues.

**Cellular Location**

Cytoplasm, cytosol

**Tissue Location**

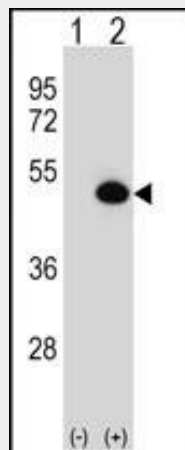
Expressed in adult liver.

**ASS1 Antibody (C-term) - Protocols**

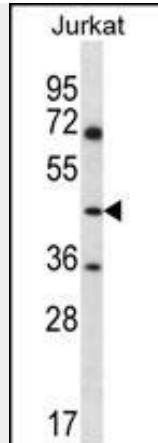
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

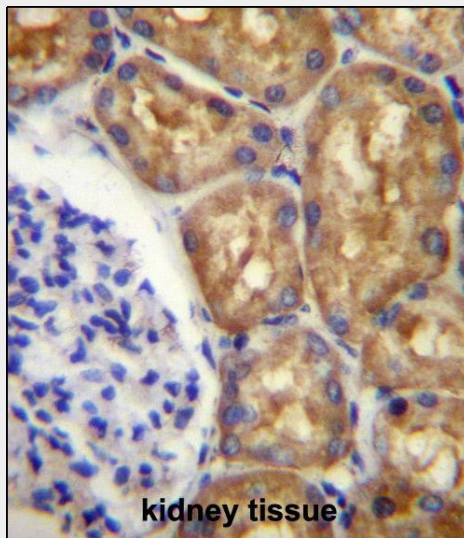
**ASS1 Antibody (C-term) - Images**



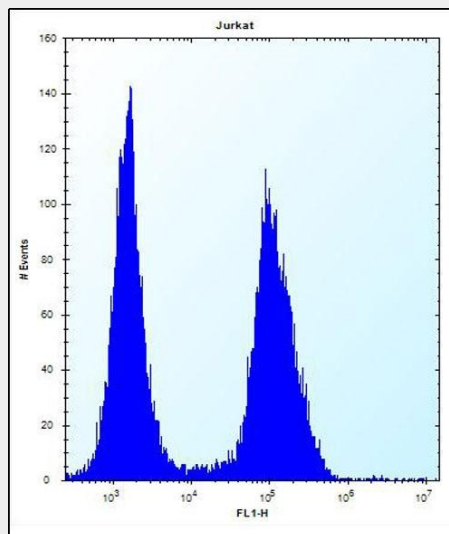
Western blot analysis of ASS1 (arrow) using rabbit polyclonal ASS1 Antibody (C-term) (Cat. #AP12606b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ASS1 gene.



ASS1 Antibody (C-term) (Cat. #AP12606b) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the ASS1 antibody detected the ASS1 protein (arrow).



ASS1 Antibody (C-term) (Cat. #AP12606b) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of ASS1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



ASS1 Antibody (C-term) (Cat. #AP12606b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

### **ASS1 Antibody (C-term) - Background**

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.

### **ASS1 Antibody (C-term) - References**

Hozyasz, K.K., et al. Arch. Oral Biol. 55(11):861-866(2010)  
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Kobayashi, E., et al. Mol. Cancer Ther. 9(3):535-544(2010)  
Tsai, W.B., et al. Mol. Cancer Ther. 8(12):3223-3233(2009)  
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)