ASS1 is a rate-limiting enzyme in the urea cycle. Citrullinemia type I is an autosomal recessive disorder that is caused by a deficiency of the urea cycle enzyme argininosuccinate synthetase (ASS1). Deficiency of ASS1 shows various clinical manifestations encompassing severely affected patients with fatal neonatal hyperammonemia as well as asymptomatic individuals with only a biochemical phenotype (PMID: 19006241).

**Basic Information**
- **Catalog Number:** 16210-1-AP
- **Size:** 43 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG9200
- **GenBank Accession Number:** BC009243
- **GeneID (NCBI):** 445
- **Full Name:** argininosuccinate synthetase 1
- **Calculated MW:** 412 aa, 47 kDa
- **Observed MW:** 45 kDa
- **Recommended Dilutions:**
  - WB: 1:1000-1:6000
  - IP: 0.5-4.0 μg for IP and 1:500-1:3000 for WB
  - IHC: 1:50-1:500

**Applications**
- **Tested Applications:** IF, IHC, IP, WB, ELISA
- **Cited Applications:** IF, IHC, WB
- **Species Specificity:** human, mouse, rat
- **Cited Species:** human, mouse, rat
- **Note:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Background Information**

**Notable Publications**

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**Storage**
- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:
- T: 1 (888) 4PTGLAB (toll free in USA), or 1(312) 455-8498 (outside USA)
- E: proteintech@ptglab.com
- W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Various lysates were subjected to SDS PAGE followed by western blot with 16210-1-AP (ASS1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.

IP Result of anti-ASS1 (IP: 16210-1-AP, 4ug; Detection: 16210-1-AP 1:1500) with HeLa cells lysate 1600ug.

Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 16210-1-AP (ASS1 Antibody) at dilution of 1:200 (under 10x lens).

Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 16210-1-AP (ASS1 Antibody) at dilution of 1:200 (under 40x lens).

Immunofluorescent analysis of (-20 Ethanol) fixed HeLa cells using 16210-1-AP (ASS1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).