

# Anti-Argininosuccinate Lyase antibody [EPR19382] ab201025

Recombinant RabMAb

[1 References](#) [4 Images](#)

### Overview

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<b>Product name</b>	Anti-Argininosuccinate Lyase antibody [EPR19382]
<b>Description</b>	Rabbit monoclonal [EPR19382] to Argininosuccinate Lyase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human fetal heart, fetal kidney, fetal spleen and fetal liver lysates; HepG2 untreated and treated with 1 $\mu$ M dexamethasone for 24 hours whole cell lysates; HEK-293 HeLa, T-47D, A549 and SH-SY5Y whole cell lysates. IP: Human fetal liver whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                      EPR19382

Isotype                                IgG

## Applications

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**The Abpromise guarantee**            Our **Abpromise guarantee** covers the use of ab201025 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 51 kDa (predicted molecular weight: 51 kDa).
IP		1/40.

## Target

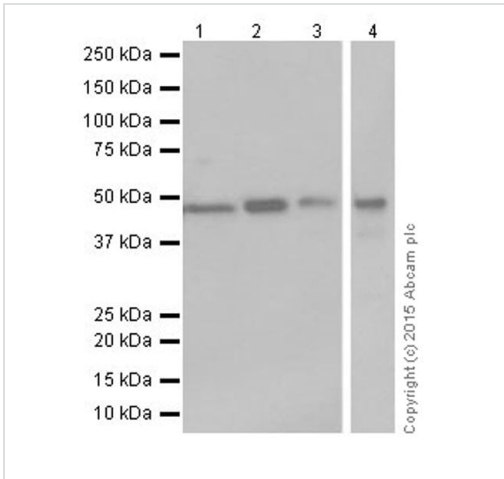
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<b>Pathway</b>	Amino-acid biosynthesis; L-arginine biosynthesis; L-arginine from L-ornithine and carbamoyl phosphate: step 3/3. Nitrogen metabolism; urea cycle; L-arginine and fumarate from (N(omega)-L-arginino)succinate: step 1/1.
<b>Involvement in disease</b>	Defects in ASL are the cause of arginosuccinicaciduria (ARGINSA) [MIM:207900]. Arginosuccinicaciduria is an autosomal recessive disorder of the urea cycle. The disease is characterized by mental and physical retardation, liver enlargement, skin lesions, dry and brittle hair showing trichorrhexis nodosa microscopically and fluorescing red, convulsions, and episodic unconsciousness.
<b>Sequence similarities</b>	Belongs to the lyase 1 family. Argininosuccinate lyase subfamily.
<b>Post-translational modifications</b>	Acetylation modifies enzyme activity in response to alterations of extracellular nutrient availability. Acetylation increased with trichostin A (TSA) or with nicotinamide (NAM). Glucose increases acetylation by about a factor of 3 with decreasing enzyme activity. Acetylation on Lys-288 is decreased on the addition of extra amino acids resulting in activation of enzyme activity.

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## Images

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Western blot - Anti-Argininosuccinate Lyase antibody [EPR19382] (ab201025)

**All lanes :** Anti-Argininosuccinate Lyase antibody [EPR19382] (ab201025) at 1/1000 dilution

**Lane 1 :** Human fetal heart tissue lysate

**Lane 2 :** Human fetal kidney tissue lysate

**Lane 3 :** Human fetal spleen tissue lysate

**Lane 4 :** Human fetal liver tissue lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

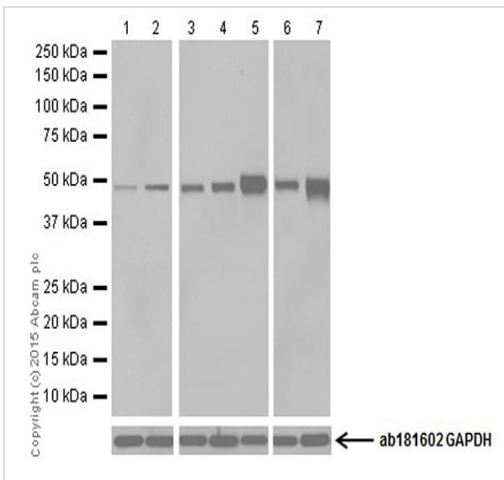
**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/100000 dilution

**Predicted band size:** 51 kDa

**Observed band size:** 51 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1,2 and 3: 8 seconds; Lane 4: 1 second.



Western blot - Anti-Argininosuccinate Lyase antibody [EPR19382] (ab201025)

**All lanes :** Anti-Argininosuccinate Lyase antibody [EPR19382] (ab201025) at 1/1000 dilution

**Lane 1 :** Untreated HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

**Lane 2 :** HepG2 (Human liver hepatocellular carcinoma cell line) treated with 1 µM dexamethasone for 24 hours whole cell lysate

**Lane 3 :** HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

**Lane 4 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 5 :** T-47D (Human ductal breast epithelial tumor cell line) whole cell lysate

**Lane 6 :** A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 7 :** SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

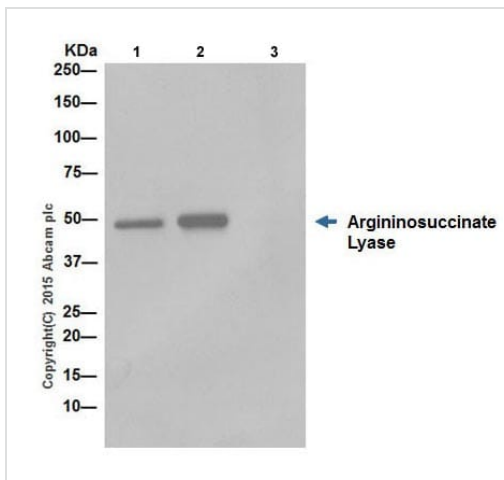
**Predicted band size:** 51 kDa

**Observed band size:** 51 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1 and 2: 1 second; Lane 3,4 and 5: 15 seconds; Lane 6 and 7: 30 seconds.

Dexamethasone treatment increase the accumulation of ASL mRNA (PMID: 2209616).



Immunoprecipitation - Anti-Argininosuccinate Lyase antibody [EPR19382] (ab201025)

Argininosuccinate Lyase was immunoprecipitated from 1mg of Human fetal liver whole cell lysate with ab201025 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab201025 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10000 dilution.

Lane 1: Human fetal liver whole cell lysate, 10µg (Input).

Lane 2: ab201025 IP in Human fetal liver whole cell lysate.

Lane 3: Rabbit IgG, monoclonal-Isotype Control ([ab172730](#)) instead of ab201025 in Human fetal liver whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 5 seconds.

Why choose a recombinant antibody?

- Research with confidence**  
Consistent and reproducible results
- Long-term and scalable supply**  
Recombinant technology
- Success from the first experiment**  
Confirmed specificity
- Ethical standards compliant**  
Animal-free production

Anti-Argininosuccinate Lyase antibody [EPR19382] (ab201025)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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