

Anti-Argininosuccinate Lyase antibody [EPR19396] ab201026

Recombinant RabMAb

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Overview

Product name	Anti-Argininosuccinate Lyase antibody [EPR19396]
Description	Rabbit monoclonal [EPR19396] to Argininosuccinate Lyase
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal liver and testis lysates; HepG2, T-47D, A549, SH-SY5Y, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; Mouse and Rat liver lysates. IP: Human fetal liver whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR19396
Isotype	IgG

Applications

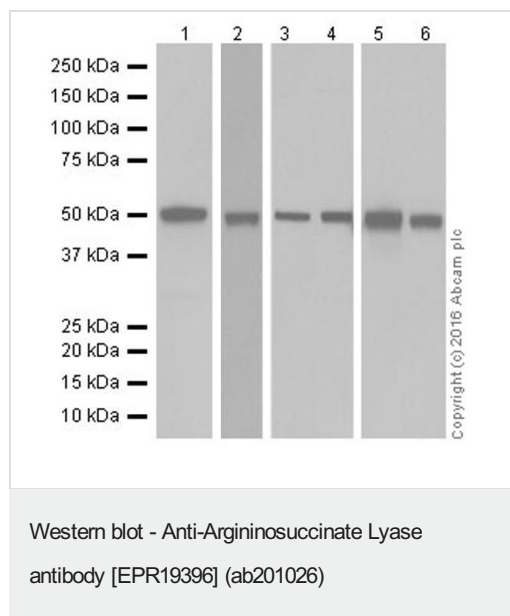
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab201026 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000. Detects a band of approximately 51 kDa (predicted molecular weight: 51 kDa).
IP		1/30.

Target

Pathway	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.
Involvement in disease	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.
Sequence similarities	Belongs to the lyase 1 family. Argininosuccinate lyase subfamily.
Post-translational modifications	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.

Images



All lanes : Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026) at 1/5000 dilution

Lane 1 : Human fetal liver tissue lysate

Lane 2 : Human testis tissue lysate

Lane 3 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 4 : T-47D (Human ductal breast epithelial tumor cell line) whole cell lysate

Lane 5 : Mouse liver lysate

Lane 6 : Rat liver lysate

Lysates/proteins at 20 µg per lane.

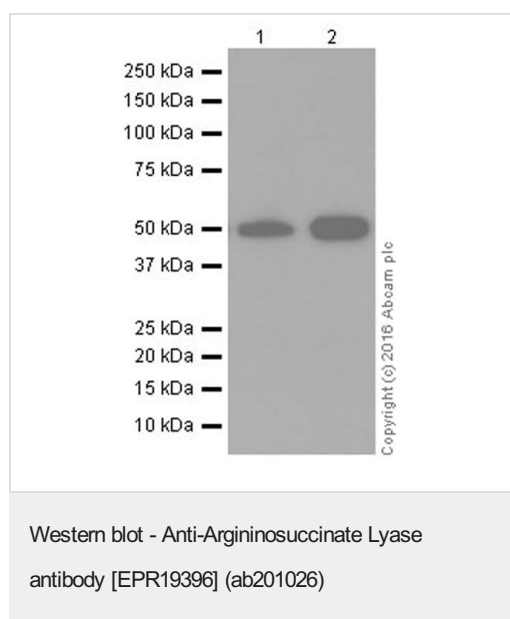
Secondary

All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 51 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 2 seconds; Lane 2: 1 minute; Lane 3 and 4: 5 seconds; Lane 5 and 6: 1 second.



All lanes : Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026) at 1/2000 dilution

Lane 1 : A549 (Human lung carcinoma cell line) whole cell lysate

Lane 2 : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

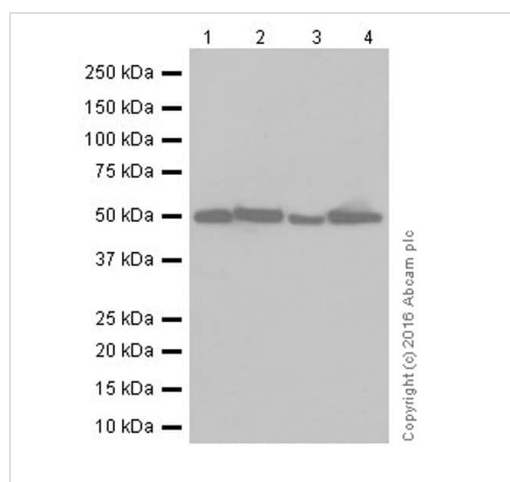
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 51 kDa

Observed band size: 51 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026)

All lanes : Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate

Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 4 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

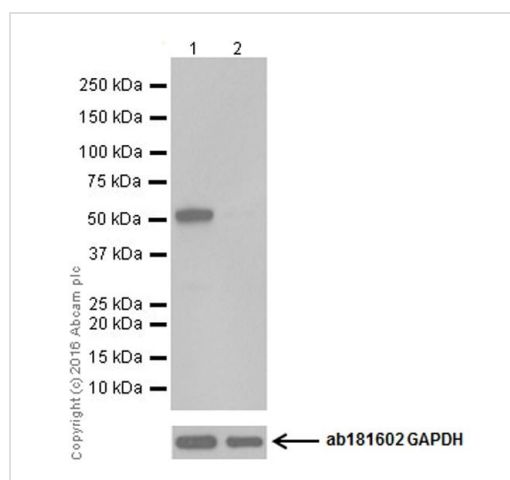
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 51 kDa

Observed band size: 51 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026)

All lanes : Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026) at 1/5000 dilution

Lane 1 : Human fetal liver lysate

Lane 2 : Human fetal lung lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

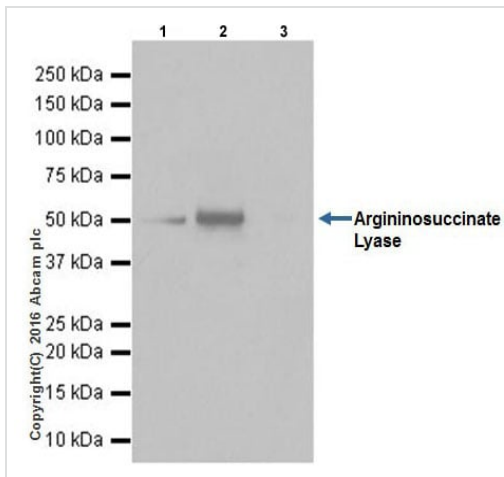
Predicted band size: 51 kDa

Observed band size: 51 kDa

Exposure time: 2 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Argininosuccinate Lyase is predominantly expressed in the liver, and weakly expressed in the lung (PMID: 8576237).



Immunoprecipitation - Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026)

Argininosuccinate Lyase was immunoprecipitated from 0.35 mg of Human fetal liver whole cell lysate with ab201026 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab201026 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: ab201026 IP in Human fetal liver whole cell lysate.

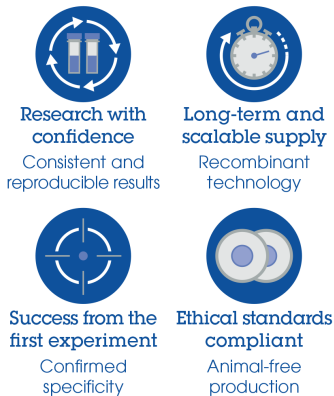
Lane 3: Rabbit IgG, monoclonal [EPR25A]-Isotype

Control ([ab172730](#)) instead of ab201026 in Human fetal liver whole cell lysate.

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

Exposure time: 1 second.

Why choose a recombinant antibody?



Anti-Argininosuccinate Lyase antibody [EPR19396] (ab201026)

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