abcam

Product datasheet

Anti-Argininosuccinate Lyase antibody ab97370

★★★★ 1 Abreviews 7 References 6 Images

Overview

Product name Anti-Argininosuccinate Lyase antibody

Description Rabbit polyclonal to Argininosuccinate Lyase

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF, IHC-P

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat, Cow

Immunogen Recombinant fragment corresponding to Human Argininosuccinate Lyase aa 13-231.

Sequence:

FVGAVDPIMEKFNASIAYDRHLWEVDVQGSKAYSRGLEK

AGLLTKAEMDQ

ILHGLDKVAEEWAQGTFKLNSNDEDIHTANERRLKELIGAT

AGKLHTGRS

RNDQVVTDLRLWMRQTCSTLSGLLWELIRTMVDRAEAER

DVLFPGYTHLQ

RAQPIRWSHWILSHAVALTRDSERLLEVRKRINVLPLGSGA

IAGNPLGVD

RELLRAELNFGAITLNSMDAPEATLGPCWGCSCGSDPGV

GRAGLGGRPVA

LLYRCCFCGEDHPRQGSILYSLLTSSKQTHVAPAAPEARP

GGAWWDRSYF

AQRPGGKEALPGGRATALLYRCCFCGEDHPQQGSTLYC

VPTSTNQAQAAP

EERPRAPWWDTSSGALRPVALKSPQVVCEAASAGLLKT

LRFVKYLPCFQV

LPLDQQLVLVRNCWASLLMLELAQDRLQFETVEVSEPSM

LQKILTTRRRE

TGGNEPLPVPTLQHHLAPPAEARKVPSASQVQAIKCFLSK

CWSLNISTK

Database link: P04424

Run BLAST with
Run BLAST with

Positive control WB: HepG2. HEK-293T, HeLa, A431 whole cell lysate. Neuro2a, GL261, C8D30, NIH/3T3, BCL-

1, Raw 264.7, C2C12 whole cell lysate. ICC/IF: HeLa cells IHC-P: U-87 MG xenograft, C2C12

xenograft tissue.

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General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab97370 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	★★★★ <u>(1)</u>	1/500 - 1/3000. Predicted molecular weight: 52 kDa.
ICC/IF		1/100 - 1/200.
IHC-P		1/100 - 1/1000.

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

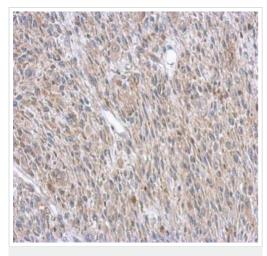
unconsciousness.

Sequence similarities Belongs to the lyase 1 family. Argininosuccinate lyase subfamily.

Post-translational modifications

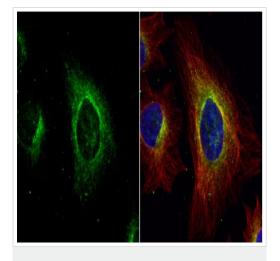
Acetylation modifies enzyme activity in response to alterations of extracellular nutrient availability. Acetylation increased with trichostin A (TSA) or with nicotinamide (NAM). Glucose increases acetylation by about a factor of 3 with decreasing enzyme activity. Acetylation on Lys-288 is decreased on the addition of extra amino acids resulting in activation of enzyme activity.

Images



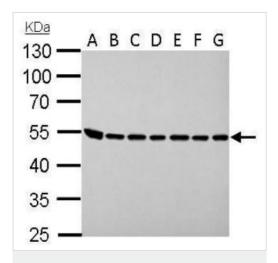
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Argininosuccinate Lyase antibody (ab97370)

Paraffin embedded C2C12 xenograft tissue stained for ASL using ab97370 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-Argininosuccinate Lyase antibody (ab97370)

HeLa cells stained for ASL (green) using ab97370 at 1/500 dilution in ICC/IF.



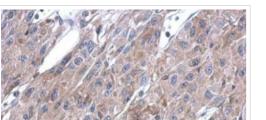
Western blot - Anti-Argininosuccinate Lyase antibody (ab97370)

All lanes : Anti-Argininosuccinate Lyase antibody (ab97370) at 1/1000 dilution

Lane 1: Neuro2a whole cell lysate
Lane 2: GL261 whole cell lysate
Lane 3: C8D30 whole cell lysate
Lane 4: NIH/3T3 whole cell lysate
Lane 5: BCL-1 whole cell lysate
Lane 6: Raw 264.7 whole cell lysate
Lane 7: C2C12 whole cell lysate

Lysates/proteins at 30 µg per lane.

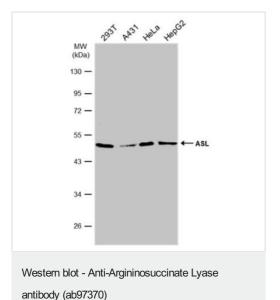
Predicted band size: 52 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Argininosuccinate Lyase antibody (ab97370)

10% SDS-PAGE.

Paraffin embedded U-87 MG xenograft tissue stained for ASL using ab97370 at 1/500 dilution in immunohistochemical analysis.



All lanes : Anti-Argininosuccinate Lyase antibody (ab97370) at 1/1000 dilution

Lane 1: HEK-293T whole cell lysate

Lane 2: A431 whole cell lysate

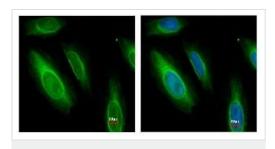
Lane 3: HeLa whole cell lysate

Lane 4: HepG2 whole cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 52 kDa

10% SDS-PAGE.



Immunocytochemistry/ Immunofluorescence - Anti-Argininosuccinate Lyase antibody (ab97370)

ab97370, at a 1/200 dilution, staining Argininosuccinate Lyase in paraformaldehyde-fixed HeLa cells by Immunofluorescence analysis. Right image is merged with a DNA probe.

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