abcam

Product datasheet

Anti-ATP citrate lyase antibody ab235926

4 Images

Overview

Product name Anti-ATP citrate lyase antibody

Description Rabbit polyclonal to ATP citrate lyase

Host species Rabbit

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

Species reactivity Reacts with: Human

Immunogen Recombinant fragment corresponding to Human ATP citrate lyase aa 4-265.

Database link: P53396

Positive control IHC-P: Human breast cancer, gastric cancer and testis tissue. ICC/IF: HepG2 cells.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.03% Proclin 300

Constituents: 50% Glycerol (glycerin, glycerine), PBS

Purity Protein G purified

Purification notes Purity >95%

Clonality Polyclonal

Isotype IgG

Applications

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The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab235926 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
IHC-P		1/20 - 1/200.
ICC/IF		1/50 - 1/200.

Target

FunctionATP-citrate synthase is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA in many tissues. Has a central role in de novo lipid synthesis. In nervous tissue it may be involved

in the biosynthesis of acetylcholine.

Sequence similarities In the N-terminal section; belongs to the succinate/malate CoA ligase beta subunit family.

In the C-terminal section; belongs to the succinate/malate CoA ligase alpha subunit family.

Contains 1 ATP-grasp domain.

Post-translational modifications

ISGylated.

Acetylated at Lys-540, Lys-546 and Lys-554 by KAT2B/PCAF. Acetylation is promoted by glucose and stabilizes the protein, probably by preventing ubiquitination at the same sites.

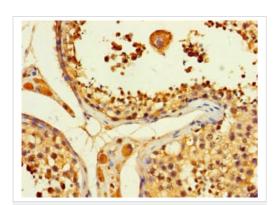
Acetylation promotes de novo lipid synthesis. Deacetylated by SIRT2.

Ubiquitinated at Lys-540, Lys-546 and Lys-554 by UBR4, leading to its degradation.

Ubiquitination is probably inhibited by acetylation at same site.

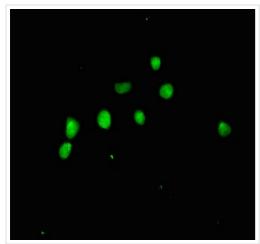
Cellular localization Cytoplasm.

Images



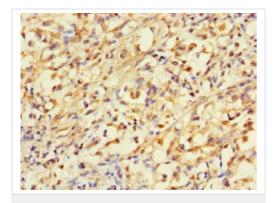
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATP citrate lyase antibody (ab235926)

Paraffin-embedded human testis tissue stained for ATP citrate lyase with ab235926 at a 1/100 dilution in immunohistochemical analysis.



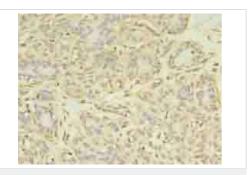
Immunocytochemistry/ Immunofluorescence - Anti-ATP citrate lyase antibody (ab235926)

HepG2 (Human liver hepatocellular carcinoma cell line) cells stained for ATP citrate lyase using ab235926 at a dilution of 1/100 in ICC/IF. Secondary used is an Alexa-Fluor $^{\tiny (R)}$ 488-conjugated Goat Anti-Rabbit lgG (H+L).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATP citrate lyase antibody (ab235926)

Paraffin-embedded human gastric cancer tissue stained for ATP citrate lyase with ab235926 at a 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATP citrate lyase antibody (ab235926)

Paraffin-embedded human breast cancer tissue stained for ATP citrate lyase with ab235926 at a 1/100 dilution in immunohistochemical analysis.

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- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

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