abcam

Product datasheet

Anti-Ornithine Carbamoyltransferase/OTC antibody [EPR19725] ab203859

Recombinant RabMAb

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Overview

Product name Anti-Ornithine Carbamoyltransferase/OTC antibody [EPR19725]

DescriptionRabbit monoclonal [EPR19725] to Ornithine Carbamoyltransferase/OTC

Host species Rabbit

Tested applications

Suitable for: WB, IHC-P, IHC-Fr, 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 small intestine lysates; Mouse and rat liver lysates. IHC-P: Human liver

and liver cancer tissues. IHC-Fr: Mouse liver tissue. IP: Human fetal liver lysate.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

Long-term security of supplyAnimal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR19725

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Isotype ΙgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab203859 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 40 kDa (predicted molecular weight: 40 kDa).
IHC-P	**** (1)	1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC-P is recommended for human only.
IHC-Fr		1/500. Antigen retrieval: Heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20).
IP		1/40.

Target

Tissue specificity Mainly expressed in liver and intestinal mucosa.

Pathway Nitrogen metabolism; urea cycle; L-citrulline from L-ornithine and carbamoyl phosphate: step 1/1.

Involvement in disease Ornithine carbamoyltransferase deficiency

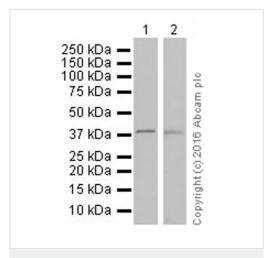
Sequence similarities Belongs to the ATCase/OTCase family.

Post-translational Acetylation at Lys-88 negatively regulates ornithine carbamoyltransferase activity in response to modifications

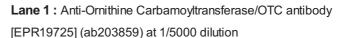
nutrient signals.

Cellular localization Mitochondrion matrix.

Images



Western blot - Anti-Ornithine
Carbamoyltransferase/OTC antibody [EPR19725]
(ab203859)



Lane 2: Anti-Ornithine Carbamoyltransferase/OTC antibody [EPR19725] (ab203859) at 1/1000 dilution

Lane 1: Human fetal liver lysate

Lane 2: Human small intestine lysate

Lysates/proteins at 20 µg per lane.

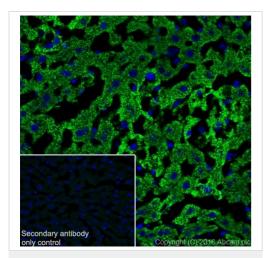
Secondary

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

Predicted band size: 40 kDa **Observed band size:** 40 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



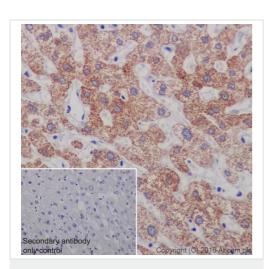
Immunohistochemistry (Frozen sections) - Anti-Ornithine Carbamoyltransferase/OTC antibody [EPR19725] (ab203859)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized Mouse liver tissue labeling Ornithine Carbamoyltransferase/OTC with ab203859 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor[®] 488) (**ab150077**) at 1/1000 dilution (green).

Cytoplasmic staining on mouse liver is observed.

Nuclear counterstain: DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Omithine

Carbamoyltransferase/OTC antibody [EPR19725]

(ab203859)

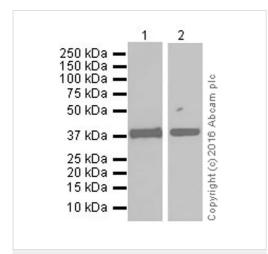
Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling Ornithine Carbamoyltransferase/OTC with ab203859 at 1/100 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on Human liver tissue is observed [PMID: 17893704].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Ornithine

Carbamoyltransferase/OTC antibody [EPR19725]
(ab203859)

All lanes : Anti-Ornithine Carbamoyltransferase/OTC antibody [EPR19725] (ab203859) at 1/1000 dilution

Lane 1 : Mouse liver lysate

Lane 2 : Rat liver lysate

Lysates/proteins at 20 µg per lane.

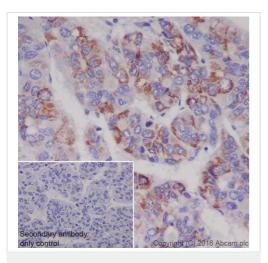
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 40 kDa **Observed band size:** 40 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 15 seconds; Lane 2: 30 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Omithine

Carbamoyltransferase/OTC antibody [EPR19725]

(ab203859)

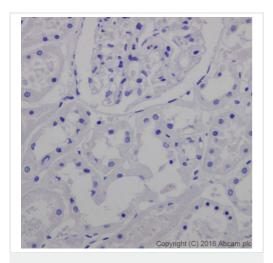
Immunohistochemical analysis of paraffin-embedded Human liver cancer tissue labeling Ornithine Carbamoyltransferase/OTC with ab203859 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on Human liver cancer tissue is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Omithine

Carbamoyltransferase/OTC antibody [EPR19725]

(ab203859)

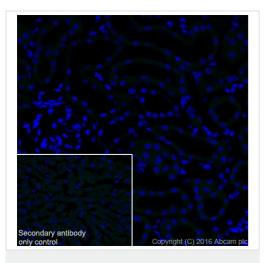
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling Ornithine Carbamoyltransferase/OTC with ab203859 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

No staining on Human kidney is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



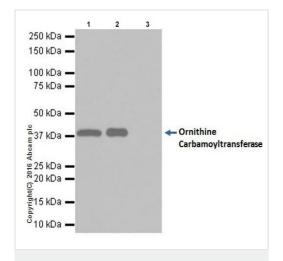
Immunohistochemistry (Frozen sections) - Anti-Ornithine Carbamoyltransferase/OTC antibody [EPR19725] (ab203859)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized Mouse kidney tissue labeling Ornithine Carbamoyltransferase/OTC with ab203859 at 1/500 dilution, followed by Goat Anti-Rabbit $\lg G$ (Alexa Fluor 488) (ab150077) at 1/1000 dilution (green).

Weakly staining on mouse kidney.

Nuclear counterstain: DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> at 1/1000 dilution.



Immunoprecipitation - Anti-Ornithine

Carbamoyltransferase/OTC antibody [EPR19725]

(ab203859)

Ornithine Carbamoyltransferase/OTC was immunoprecipitated from 0.35 mg of Human fetal liver lysate with ab203859 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab203859 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

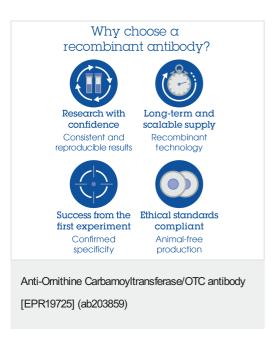
Lane 1: Human fetal liver lysate, 10µg (Input).

Lane 2: ab203859 IP in Human fetal liver lysate.

Lane 3: Rabbit lgG,monoclonal [EPR25A] - Isotype Control (<u>ab172730</u>) instead of ab203859 in Human fetal liver lysate.

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

Exposure time: 3 minutes.



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

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