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OTC Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6928c

Specification

OTC Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P00480
Other Accession	P00481, O19072, P11725, Q9N1U7, P84010
Reactivity	**Human, Mouse, Rat**
Predicted	**Bovine, Pig, Sheep**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**71-98**

OTC Antibody (Center) - Additional Information

Gene ID 5009

Other Names
Ornithine carbamoyltransferase, mitochondrial, Ornithine transcarbamylase, OTCase, OTC

Target/Specificity
This OTC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 71-98 amino acids of human OTC.

Dilution
WB~~1:2000
IHC-P~~1:10~50
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
OTC Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

OTC Antibody (Center) - Protein Information

Name OTC (HGNC:8512)

Function Catalyzes the second step of the urea cycle, the condensation of carbamoyl phosphate with L-ornithine to form L-citrulline (PubMed:2556444, PubMed:6372096, PubMed:8112735). The urea cycle ensures the detoxification of ammonia by converting it to urea for excretion (PubMed:2556444).

Cellular Location
Mitochondrion matrix

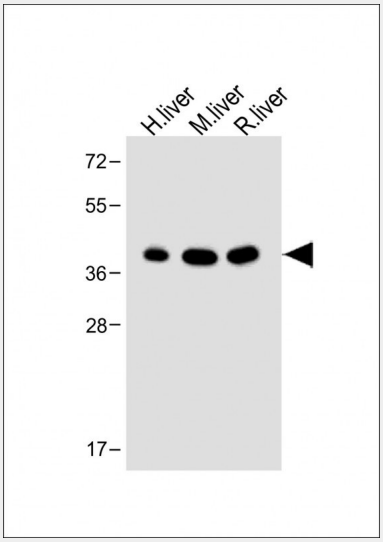
Tissue Location
Mainly expressed in liver and intestinal mucosa.

OTC Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OTC Antibody (Center) - Images



All lanes : Anti-OTC Antibody (Center) at 1:2000 dilution Lane 1: Human liver lysate Lane 2: Mouse liver lysate Lane 3: Rat liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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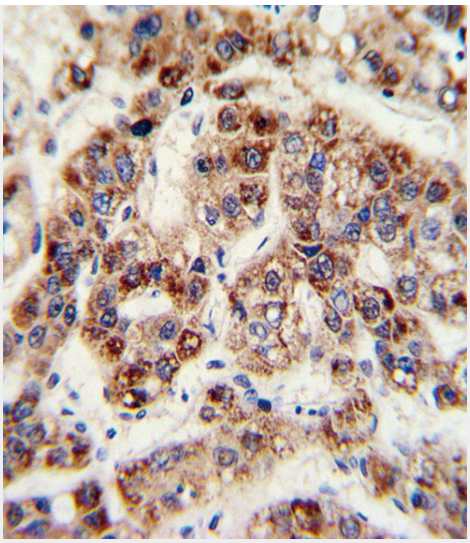
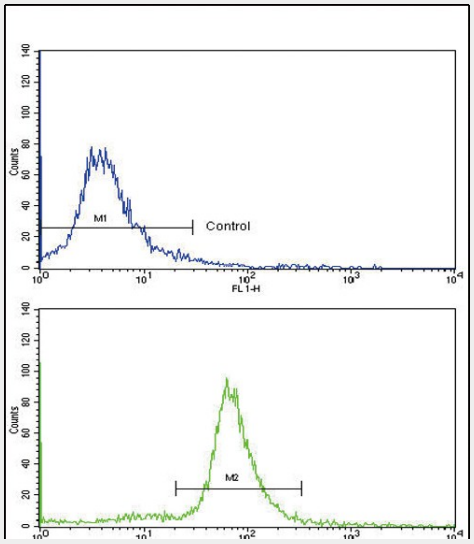


Formalin-fixed and paraffin-embedded human hepatoarcinoma with OTC Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of ATDC5 cells using OTC Antibody (Center)(bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

OTC Antibody (Center) - Background

OTC is a mitochondrial matrix enzyme. Missense, nonsense, and frameshift mutations in this enzyme lead to ornithine transcarbamylase deficiency, which causes hyperammonemia.

OTC Antibody (Center) - References

Hansmannel,F., et.al., Neurosci. Lett. 449 (1), 76-80 (2009)

OTC Antibody (Center) - Citations

- Modeling lethal X-linked genetic disorders in pigs with ensured fertility.