

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

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**OTC Antibody (Center) - Product Information**

Application	IHC-P, FC, WB,E
Primary Accession	<a href="#">P00480</a>
Other Accession	<a href="#">P00481</a> , <a href="#">O19072</a> , <a href="#">P11725</a> , <a href="#">O9N1U7</a> , <a href="#">P84010</a>
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, OTCCase, 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**

IHC-P~~1:10~50

FC~~1:10~50

WB~~1:2000

E~~Use at an assay dependent concentration.

**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**

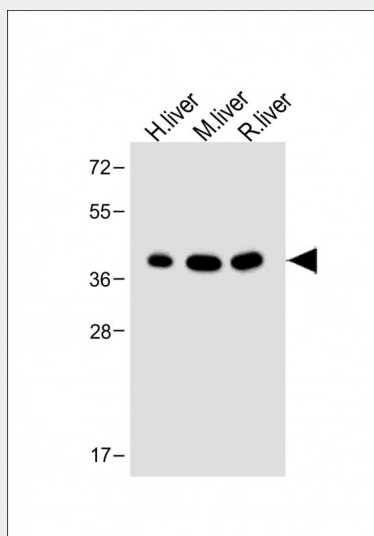
Mainly expressed in liver and intestinal mucosa.

**OTC Antibody (Center) - Protocols**

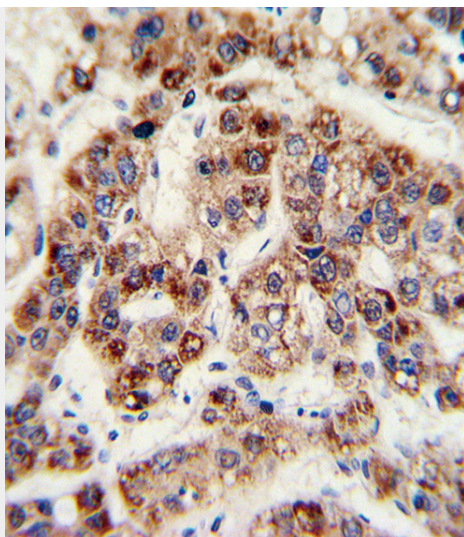
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

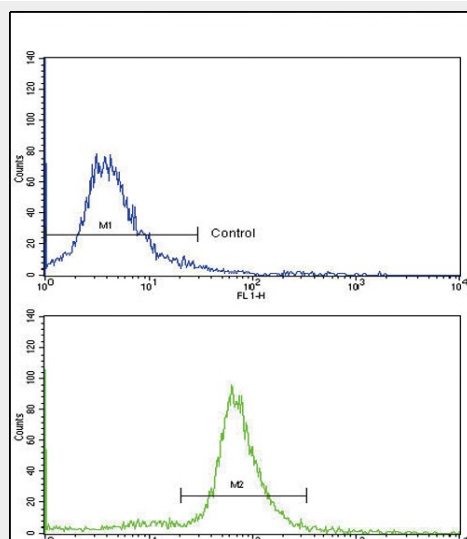
**OTC Antibody (Center) - Images**



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.



Formalin-fixed and paraffin-embedded human hepatocarcinoma 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

Hansmann, 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.](#)