

OTC Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6928c

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	<u>P00480</u>
Other Accession	<u>P00481, 019072, P11725, Q9N1U7</u>
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	39935
Antigen Region	71-98

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	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 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.

Protein Information

Name	OTC (<u>HGNC:8512</u>)
Function	Catalyzes the second step of the urea cycle, the condensation of carbamoyl phosphate with L-ornithine to form L-citrulline (PubMed: <u>2556444</u> , PubMed: <u>6372096</u> , PubMed: <u>8112735</u>). The urea cycle ensures the

	detoxification of ammonia by converting it to urea for excretion (PubMed: <u>2556444</u>).
Cellular Location	Mitochondrion matrix
Tissue Location	Mainly expressed in liver and intestinal mucosa.

Background

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

References

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

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 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 cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis. • Modeling lethal X-linked genetic disorders in pigs with ensured fertility.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.