10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

OTC Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6928c

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P00480
Other Accession	P00481, O19072, P11725, Q9N1U7
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Pig, Bovine, Canine, Rabbit, Chicken
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 (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.

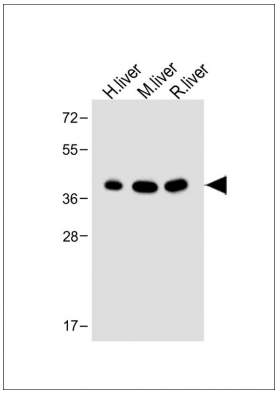
Background

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

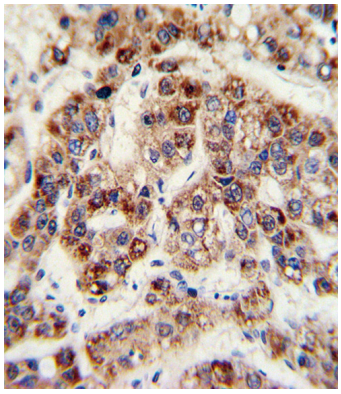
References

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

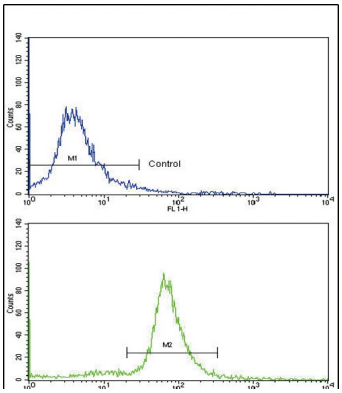
Images



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.

Citations

- 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'.