

# CROT Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9380a

## **Product Information**

Application	FC, IHC-P, WB, E
Primary Accession	<u>Q9UKG9</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19235
Calculated MW	70178
Antigen Region	49-79

## **Additional Information**

Gene ID	54677
Other Names	Peroxisomal carnitine O-octanoyltransferase, COT, CROT, COT
Target/Specificity	This CROT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 49-79 amino acids from the N-terminal region of human CROT.
Dilution	FC~~1:10~50 IHC-P~~1:100~500 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	CROT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	CROT
Synonyms	СОТ
Function	Beta-oxidation of fatty acids. The highest activity concerns the C6 to C10 chain length substrate. Converts the end product of pristanic acid beta

#### **Cellular Location**

Peroxisome.

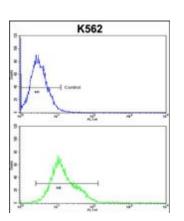
# Background

CROT encodes a member of the carnitine/choline acetyltransferase family. The encoded protein converts 4,8-dimethylnonanoyl-CoA to its corresponding carnitine ester. This transesterification occurs in the peroxisome and is necessary for transport of medium- and long- chain acyl-CoA molecules out of the peroxisome to the cytosol and mitochondria. The protein thus plays a role in lipid metabolism and fatty acid beta-oxidation. Alternatively spliced transcript variants have been described.

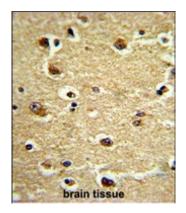
## References

Li, Y.L., et al. FEBS J. 276(1):303-314(2009) Morillas, M., et al. J. Biol. Chem. 277(13):11473-11480(2002) van der Leij, F.R., et al. Mol. Genet. Metab. 71 (1-2), 139-153 (2000) : Ferdinandusse, S., et al. Biochem. Biophys. Res. Commun. 263(1):213-218(1999)

### Images

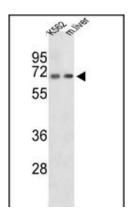


CROT Antibody (N-term)(Cat. #AP9380a) flow cytometric analysis of k562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CROT Antibody (N-term), 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.

Western blot analysis of CROT Antibody (N-term) (Cat. #AP9380a) in K562 cell line and mouse liver tissue lysates (35ug/lane). CROT (arrow) was detected using the purified Pab.



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