

# CROT Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9380a

## Product Information

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

## Additional Information

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<b>Gene ID</b>	54677
<b>Other Names</b>	Peroxisomal carnitine O-octanoyltransferase, COT, CROT, COT
<b>Target/Specificity</b>	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.
<b>Dilution</b>	FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	CROT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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

oxidation, 4,8-dimethylnonanoyl-CoA, to its corresponding carnitine ester.

## Cellular Location

Peroxisome.

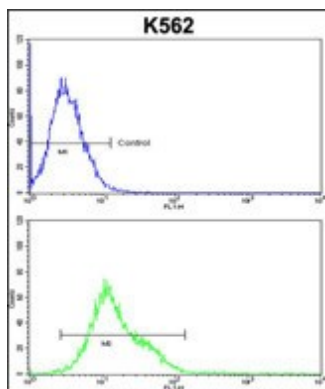
## Background

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.

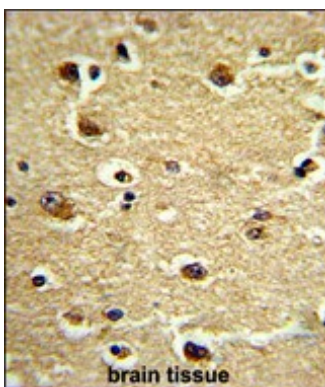
## References

Li, Y.L., et al. FEBS J. 276(1):303-314(2009)  
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Ferdinandusse, S., et al. Biochem. Biophys. Res. Commun. 263(1):213-218(1999)

## Images

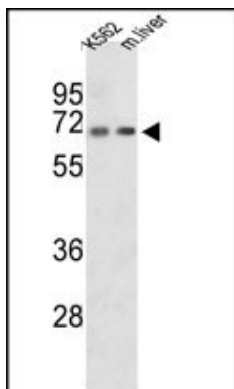


CROT Antibody (N-term)(Cat. #AP9380a) flow cytometric analysis of k562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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'.