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

CRAT Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6565a

Specification

CRAT Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P43155
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**70858**
Antigen Region	**66-96**

CRAT Antibody (N-term) - Additional Information

Gene ID 1384

Other Names
Carnitine O-acetyltransferase, Carnitine acetylase, Carnitine acetyltransferase, CAT, CrAT, CRAT, CAT1

Target/Specificity
This CRAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-96 amino acids from the N-terminal region of human CRAT.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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
CRAT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CRAT Antibody (N-term) - Protein Information

Name CRAT (HGNC:2342)

Synonyms CAT1

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Function Catalyzes the reversible transfer of acyl groups from carnitine to coenzyme A (CoA) and regulates the acyl-CoA/CoA ratio. Also plays a crucial role in the transport of fatty acids for beta-oxidation (PubMed:15099582, PubMed:29395073). Responsible for the synthesis of short- and branched-chain acylcarnitines (PubMed:23485643). Active towards some branched-chain amino acid oxidation pathway (BCAAO) intermediates (PubMed:23485643). Trans-2- enoyl-CoAs and 2-methylacyl-CoAs are poor substrates (PubMed:23485643).

Cellular Location
Endoplasmic reticulum. Peroxisome. Mitochondrion inner membrane; Peripheral membrane protein; Matrix side [Isoform 2]: Peroxisome

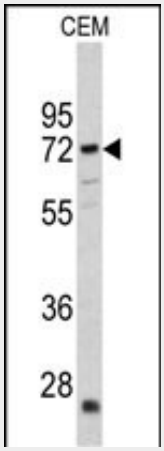
Tissue Location
Mostly in skeletal muscle, less in heart, liver and pancreas, only weakly detectable in brain, placenta, lung and kidney

CRAT Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CRAT Antibody (N-term) - Images



Western blot analysis of CRAT antibody (N-term) (Cat. #AP6565a) in CEM cell line lysates (35ug/lane). CRAT (arrow) was detected using the purified Pab.

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CRAT Antibody (N-term) (Cat. #AP6565a) IHC analysis in formalin fixed and paraffin embedded human Skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CRAT Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

CRAT Antibody (N-term) - Background

CRAT is carnitine acetyltransferase (CRAT), which is a key enzyme in the metabolic pathway in mitochondria, peroxisomes and endoplasmic reticulum. CRAT catalyzes the reversible transfer of acyl groups from an acyl-CoA thioester to carnitine and regulates the ratio of acylCoA/CoA in the subcellular compartments.

CRAT Antibody (N-term) - References

Govindasamy,L., J. Struct. Biol. 146 (3), 416-424 (2004)
Jogl,G., Cell 112 (1), 113-122 (2003)