SANTA CRUZ BIOTECHNOLOGY, INC.

CROT (H-300): sc-134608

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CROT (carnitine O-octanoyltransferase), also called COT (carnitine octanoyltransferase), is a member of the carnitine/choline acetyltransferase protein family, which also includes CAT, CPTI, CPTI-M and CPTII. Carnitine/choline acetyltransferase family members are essential for the β-oxidation of fatty acids. CROT localizes to peroxisomes and is highly expressed in liver, kidney and proximal intestinal epithelium. CROT plays a role in lipid metabolism, catalyzing the reversible conversion of acyl-CoAs to their corresponding carnitine esters—a crucial step in facilitating the transport of fatty acids out of peroxisomes to mitochondria, where they can be further degraded. With a preference for straight and branched medium-chain acyl-CoAs (C6-C10 chain length), CROT plays an important role in energy metabolism in eukaryotes. In addition, CROT activity can be inhibited by malonyl-CoA.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CROT (human) mapping to 7q21.12; Crot (mouse) mapping to 5 A1.

SOURCE

CROT (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of CROT of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CROT (H-300) is recommended for detection of CROT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

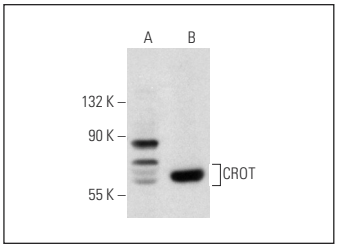
CROT (H-300) is also recommended for detection of CROT in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for CROT siRNA (h): sc-89588, CROT siRNA (m): sc-142579, CROT shRNA Plasmid (h): sc-89588-SH, CROT shRNA Plasmid (m): sc-142579-SH, CROT shRNA (h) Lentiviral Particles: sc-89588-V and CROT shRNA (m) Lentiviral Particles: sc-142579-V.

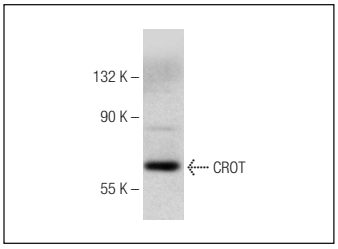
Molecular Weight of CROT: 70 kDa.

Positive Controls: CROT (h): 293T Lysate: sc-115494, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

DATA



CROT (H-300): sc-134608. Western blot analysis of CROT expression in non-transfected: sc-117752 (**A**) and human CROT transfected: sc-115494 (**B**) 293T whole cell lysates.



CROT (H-300): sc-134608. Western blot analysis of CROT expression in A-431 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS Satisfaction Guaranteed

Try **CROT (H-1): sc-365976** or **CROT (E-2): sc-365408**, our highly recommended monoclonal alternatives to CROT (H-300).