

CROT (N-15): sc-162715

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.

CHROMOSOMAL LOCATION

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

SOURCE

CROT (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CROT of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-162715 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CROT (N-15) 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (N-15) is also recommended for detection of CROT in additional species, including equine, canine, 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.

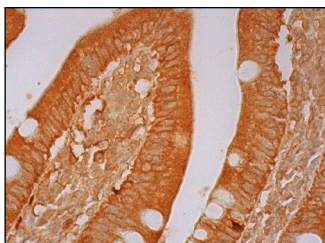
Molecular Weight of CROT: 70 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CROT (N-15): sc-162715. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
 Satisfaction
 Guaranteed

Try **CROT (H-1): sc-365976** or **CROT (E-2): sc-365408**, our highly recommended monoclonal alternatives to CROT (N-15).