BACKGROUND
ATP-citrate synthase, also designated ATP-citrate lyase or citrate cleavage enzyme, is a cytoplasmic homotetramer belonging to the succinate/malate CoA ligase family. The gene coding for this protein maps against chromosome 17q12-q21. ATP-citrate synthase catalyses the formation of acetyl-CoA and oxaloacetate from citrate and CoA. This product, acetyl-CoA, is necessary for both fatty acid and cholesterol biosynthesis. ATP-citrate lyase is important in the biosynthesis of acetylcholine in nervous tissue.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: ACLY (human) mapping to 17q21.2; Acly (mouse) mapping to 11 D.

SOURCE
ATP-citrate synthase (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ATP-citrate synthase 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.

Blocking peptide available for competition studies, sc-30538 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

APPLICATIONS
ATP-citrate synthase (C-20) is recommended for detection of ATP-citrate synthase 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).

ATP-citrate synthase (C-20) is also recommended for detection of ATP-citrate synthase in additional species, including equine, canine, bovine, porcine and avian.


Molecular Weight of ATP-citrate synthase: 120 KDa.

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

DATA
Western blot analysis of ATP-citrate synthase phosphorylation in untreated (A,D), calyculin A treated (B,E) and calyculin A and lambda protein phosphatase (sc-200312A) treated (C,F) Jurkat whole cell lysates. Antibodies tested is p-ATP-citrate synthase (A-12): sc-374647 (A,B,C) and ATP-citrate synthase (C-20): sc-30538 (D,E,F).

SELECT PRODUCT CITATIONS

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

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