

SOAT1 (1-125): sc-4495 WB

BACKGROUND

SOAT1 (sterol O-acyltransferase 1), also designated ACAT1, is a homotetrameric enzyme that catalyzes the formation of cholesterol esters from cholesterol and long-chain fatty acyl coenzyme A. The gene encoding human SOAT1 maps to chromosome 1 and is expressed as a protein that localizes to the endoplasmic reticulum (ER) in several tissues, including liver, kidney, adrenal glands and macrophages. SOAT1 is involved in cellular cholesterol homeostasis as well as in foam cell formation and the subsequent progression of atherosclerosis. Several SOAT inhibitors have been developed for the treatment of atherosclerosis. SOAT2 (sterol O-acyltransferase 2), also known as ACAT2 (acyl coenzyme A), participates in lipoprotein assembly, catalyzing cholesterol esterification in mammalian cells. SOAT2 is an integral membrane protein that localizes to the endoplasmic reticulum of human intestinal cells. SOAT2 deficiency contributes to severe mental retardation and hypotonus.

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CHROMOSOMAL LOCATION

Genetic locus: SOAT1 (human) mapping to 1q25; Soat1 (mouse) mapping to 1 G3.

SOURCE

SOAT1 (1-125) is expressed in *E. coli* as a 41 kDa tagged fusion protein corresponding to amino acids 1-125 of SOAT1 of human origin.

PRODUCT

SOAT1 (1-125) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

SOAT1 (1-125) is suitable as a Western blotting control for sc-20951, sc-21028, sc-21030, sc-59442, sc-81771 and sc-81777.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

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.