

CEL (K-16): sc-34880

BACKGROUND

Carboxyl ester lipase (CEL), previously named cholesterol esterase or bile salt-stimulated lipase, hydrolyzes cholesteryl esters, tri-, di-, and mono-acylglycerols, phospholipids, lysophospholipids and ceramide. CEL contains an active site catalytic triad of serine-histidine-aspartate, which is centrally located within the enzyme structure. Production of CEL occurs primarily in the pancreas and lactating mammary gland, but it is also expressed in liver, macrophages and in the vessel wall. CEL has a wide substrate reactivity, and may perform multiple functions in lipid and lipoprotein metabolism and atherosclerosis. It also participates in chylomicron assembly and secretion, which is mediated by its ceramide hydrolytic activity.

REFERENCES

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- Hui, D.Y., et al. 2002. Carboxyl ester lipase: structure-function relationship and physiological role in lipoprotein metabolism and atherosclerosis. *J. Lipid Res.* 43: 2017-2030.
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CHROMOSOMAL LOCATION

Genetic locus: CEL (human) mapping to 9q34.2; Cel (mouse) mapping to 2 A3.

SOURCE

CEL (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CEL 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-34880 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

CEL (K-16) is recommended for detection of carboxyl ester lipase (CEL) long isoform 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).

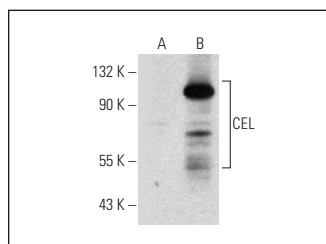
CEL (K-16) is also recommended for detection of carboxyl ester lipase (CEL) long isoform in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CEL siRNA (h): sc-44447, CEL siRNA (m): sc-44448, CEL shRNA Plasmid (h): sc-44447-SH, CEL shRNA Plasmid (m): sc-44448-SH, CEL shRNA (h) Lentiviral Particles: sc-44447-V and CEL shRNA (m) Lentiviral Particles: sc-44448-V.

Molecular Weight of CEL: 74 kDa.

Positive Controls: mouse pancreas extract: sc-364244 or CEL (h): 293T Lysate: sc-115618.

DATA



CEL (K-16): sc-34880. Western blot analysis of CEL expression in non-transfected: sc-117752 (A) and human CEL transfected: sc-115618 (B) 293T whole cell lysates.

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.



Try **CEL (E-4): sc-377087** or **CEL (D-1): sc-376956**, our highly recommended monoclonal alternatives to CEL (K-16).