**BACKGROUND**

Carboxyl ester lipase (CEL), previously named cholesterol esterase or bile salt-stimulated lipase, hydrolyzes cholesterol esters, phospholipids, lysophospholipids, ceramide and tri-, di- and mono-acylglycerols. CEL contains an active site catalytic triad of serine-histidine-aspartate, which is centrally located within the enzyme structure. Production of CEL primarily occurs 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. CEL also participates in chylomicron assembly and secretion, which is mediated by its ceramide hydrolytic activity.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

CEL (E-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 439-475 within an internal region of CEL of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. CEL (E-4) is available conjugated to agarose (sc-377087 AC), 500 µg/0.25 ml sodium azide and 0.1% gelatin.

**APPLICATIONS**

CEL (E-4) is recommended for detection of CEL long isofrom of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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). CEL (E-4) is also recommended for detection of CEL long isofrom in additional species, including equine and canine.

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: PC-12 cell lysate: sc-2250 or BT-20 cell lysate: sc-2223.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting LuminoL Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2033 (0.5 mg/0.2 ml serum/0.2 ml plasma). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

- **CEL (E-4):** sc-377087. Western blot analysis of CEL expression in MDA-MB-231 (A), BT-20 (B), PC-12 (C), CO-67 (D) and IM-9 (E) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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