

32-6693: CEL Mouse

Application : Functional Assay

Bile salt-activated lipase, BAL, EC 3.1.1.13, EC 3.1.1.3, Bile salt-stimulated lipase, BSSL, Bucelipase,

Alternative Name : Carboxyl ester lipase, Cholesterol esterase, Pancreatic lysophospholipase, Sterol esterase, CEL, FAP, BSDL, CELL, FAPP, LIPA, Cease, MODY8.

Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Carboxyl ester lipase also known as CEL, formerly called cholesterol esterase or bile salt-stimulated lipase, is an enzyme with lipolytic capability of hydrolyzing cholesteryl esters, tri-, di-, and mono- phospholipids, acylglycerol, ceramide and lysophospholipids. The carboxyl terminus of the enzyme controls enzymatic activity by creating hydrogen bonds with the surface loop to partly shield the active site. The active catalytic site triad of serine-histidine-aspartate is centrally located in the enzyme structure and is partly covered by a surface loop. Bile salt binding to the loop domain set free the active site for accessibility by water-insoluble substrates. CEL is produced mainly in the pancreas and lactating mammary gland, thus the protein is also expressed in liver, macrophages, and in the vessel wall.

CEL Mouse produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 585 amino acids (21-599 aa) and having a molecular mass of 64.5kDa. CEL is fused to a 6 amino acid His tag at C-terminus and purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : The CEL solution (0.5 mg/ml) contains 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : AKLGAVYTEG GFVEGVNKKL SLLGGDSVDI FKGIPFATAK TLENPQRHPG WQGLKATNFKKRCLQATIT QDNTYGQEDC LYLNIVVPQG RKQVSHNLPV MVWIYGGAFI MGSQGANFLKNLYDGEEI ATRGNVIVVT FNYRVGPLGF LSTGDANLPG NFGLRDQHMA IAWVKRNIAAFGGDPDNITI FGESAGAASV SLQTLSPYNK GLIRRAISQS GMALSPWAIQ KNPLFWAKTIKKVGCPTED TGKMAACLI TDPRALTLAY KLPVKKQEYP VVHYLAFIPV IDGDFIPDDPINLYNNTADI DYIAGINNMD GHLFATIDVP AVDKTKQTVT EEDFYRLVSG HTVAKGLKGAQATFDIYTES WAQDPSQENM KKTVAFETD VLFLIPEIA LAQKHAHAKS AKTYSYLFSHPSRMPIYPKW MGADHADDLQ YVFGKPFATP LGYRPQDRAV SKAMIAWWTN FARSGDPNMGNSPVPTHWYP YTLNGNYLD ITKTITSASM KEHLREKFLK FWAFTFEVLP TVTGDQDTLTPPEDDSEVAP DPPSDDSQVV PVPPTDDSVE AQMPATIGFH HHHHH

Application Note

Specific activity is > 100,000 pmol/min/ug. Measured by the amount of enzyme that hydrolyze 1.0 umole of p-nitrophenyl butyrate to p-nitrophenol per minute at pH7.5 at 25°C.