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CEL Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12555c

Product Information

Application	WB, E
Primary Accession	P19835
Other Accession	NP_001798.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31034
Calculated MW	79322
Antigen Region	454-482

Additional Information

Gene ID	1056
Other Names	Bile salt-activated lipase, BAL, Bile salt-stimulated lipase, BSSL, Bucelipase, Carboxyl ester lipase, Cholesterol esterase, Pancreatic lysophospholipase, Sterol esterase, CEL, BAL
Target/Specificity	This CEL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 454-482 amino acids from the Central region of human CEL.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CEL Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CEL
Synonyms	BAL

Function	Catalyzes the hydrolysis of a wide range of substrates including cholesteryl esters, phospholipids, lysophospholipids, di- and tri-acylglycerols, and fatty acid esters of hydroxy fatty acids (FAHFAs) (PubMed:10220579, PubMed:27509211, PubMed:27650499, PubMed:8471055). Preferentially hydrolyzes FAHFAs with the ester bond further away from the carboxylate. Unsaturated FAHFAs are hydrolyzed more quickly than saturated FAHFAs (By similarity). Has an essential role in the complete digestion of dietary lipids and their intestinal absorption, along with the absorption of fat-soluble vitamins (PubMed:10220579, PubMed:27509211, PubMed:27650499, PubMed:8471055).
Cellular Location	Secreted.
Tissue Location	Mammary gland and pancreas. Detected in pancreatic and duodenal juice (at protein level) (PubMed:21784842). Expressed by eosinophils.

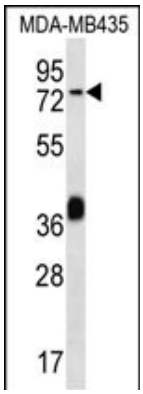
Background

The protein encoded by this gene is a glycoprotein secreted from the pancreas into the digestive tract and from the lactating mammary gland into human milk. The physiological role of this protein is in cholesterol and lipid-soluble vitamin ester hydrolysis and absorption. This encoded protein promotes large chylomicron production in the intestine. Also its presence in plasma suggests its interactions with cholesterol and oxidized lipoproteins to modulate the progression of atherosclerosis. In pancreatic tumoral cells, this encoded protein is thought to be sequestrated within the Golgi compartment and is probably not secreted. This gene contains a variable number of tandem repeat (VNTR) polymorphism in the coding region that may influence the function of the encoded protein.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Torsvik, J., et al. Hum. Genet. 127(1):55-64(2010)
McGeachie, M., et al. Circulation 120(24):2448-2454(2009)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Li, L., et al. Metab. Clin. Exp. 57(10):1361-1368(2008)

Images



CEL Antibody (Center) (Cat. #AP12555c) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the CEL antibody detected the CEL protein (arrow).