

Liver Carboxylesterase 1 Antibody
Rabbit mAb
Catalog # AP91673**Specification****Liver Carboxylesterase 1 Antibody - Product Information**

Application	WB, FC, IP
Primary Accession	P23141
Reactivity	Rat
Clonality	Monoclonal
Other Names	
ACAT; CE 1; CEH; CES1; CES2; CESDD1; Egasyn; ES-HTEL; ES-x; Es22; Esterase 22; hCE 1; HMSE; HMSE1; REH; SES1; TGH; Triacylglycerol hydrolase;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	62521 Da

Liver Carboxylesterase 1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Liver Carboxylesterase 1
Description	Involved in the detoxification of xenobiotics and in the activation of ester and amide prodrugs. Hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty acyl-CoA ester. Hydrolyzes the methyl ester group of cocaine to form benzoylecgonine.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Liver Carboxylesterase 1 Antibody - Protein InformationName CES1 ([HGNC:1863](#))

Synonyms CES2, SES1

Function

Involved in the detoxification of xenobiotics and in the activation of ester and amide prodrugs (PubMed: [18762277](http://www.uniprot.org/citations/18762277)), PubMed: [7980644](http://www.uniprot.org/citations/7980644), PubMed: [9169443](http://www.uniprot.org/citations/9169443), PubMed: [9490062](http://www.uniprot.org/citations/9490062)). Hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty

acyl-CoA ester (PubMed:18762277, PubMed:7980644, PubMed:9169443, PubMed:9490062). Hydrolyzes the methyl ester group of cocaine to form benzoylecgonine (PubMed:7980644). Catalyzes the transesterification of cocaine to form cocaethylene (PubMed:7980644). Displays fatty acid ethyl ester synthase activity, catalyzing the ethyl esterification of oleic acid to ethyloleate (PubMed:7980644). Converts monoacylglycerides to free fatty acids and glycerol. Hydrolyzes of 2-arachidonoylglycerol and prostaglandins (PubMed:21049984). Hydrolyzes cellular cholesteryl esters to free cholesterol and promotes reverse cholesterol transport (RCT) by facilitating both the initial and final steps in the process (PubMed:11015575, PubMed:16024911, PubMed:16971496, PubMed:18762277). First of all, allows free cholesterol efflux from macrophages to extracellular cholesterol acceptors and secondly, releases free cholesterol from lipoprotein-delivered cholesteryl esters in the liver for bile acid synthesis or direct secretion into the bile (PubMed:16971496, PubMed:18599737, PubMed:18762277).

Cellular Location

Endoplasmic reticulum lumen. Cytoplasm Lipid droplet. Note=Moves from cytoplasm to lipid droplets upon lipid loading. Associates with lipid droplets independently of triglycerides (TG) content of the droplets and hydrolyzes cholesteryl esters more efficiently from mixed droplets

Tissue Location

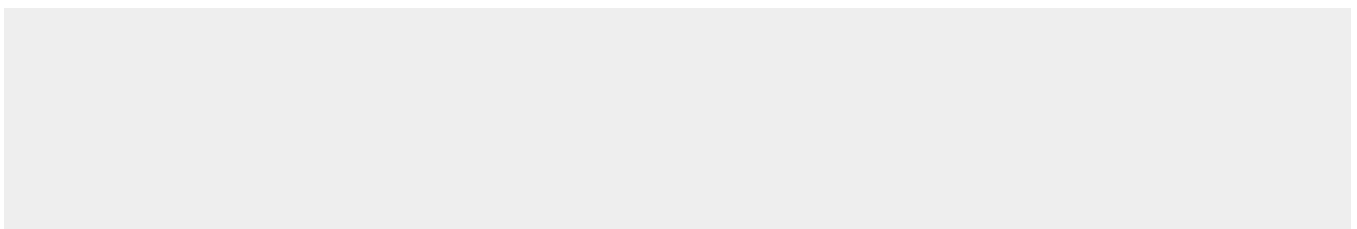
Expressed predominantly in liver with lower levels in heart and lung (PubMed:10562416).
Expressed in macrophages (PubMed:11015575, PubMed:18762277, PubMed:21049984)

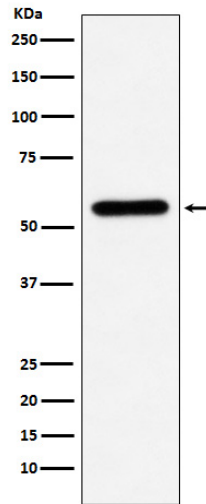
Liver Carboxylesterase 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Liver Carboxylesterase 1 Antibody - Images





Western blot analysis of Liver Carboxylesterase 1 expression in U937 cell lysate.