

Anti-Carboxylesterase 1 / CES1 Antibody
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18329**Specification**

Anti-Carboxylesterase 1 / CES1 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P23141
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	62521

Anti-Carboxylesterase 1 / CES1 Antibody - Additional Information**Gene ID** 1066**Alias Symbol** CES1**Other Names**

CES1, ACAT, Brain carboxylesterase hBr1, Carboxylesterase 1, Carboxylesterase 2 (liver), CEH, CES1A1, CES1A2, Cocaine carboxylesterase, Egasyn, HMSE, Liver carboxylesterase 1, HCE-1, PCE-1, Retinyl ester hydrolase, TGH, Triacylglycerol hydrolase, REH ...

Target/Specificity

Human Carboxylesterase 1 / CES1

Reconstitution & Storage

Affinity purified

Precautions

Anti-Carboxylesterase 1 / CES1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-Carboxylesterase 1 / CES1 Antibody - Protein Information**Name** CES1 ([HGNC:1863](#))**Synonyms** CES2, SES1**Function**

Involved in the detoxification of xenobiotics and in the activation of ester and amide prodrugs (PubMed:7980644, PubMed:9169443, PubMed:9490062, PubMed:18762277). Hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty acyl-CoA ester (PubMed:7980644)

target="_blank">7980644, PubMed:9169443, PubMed:9490062, PubMed:18762277). 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 ethyl oleate (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:18762277, PubMed:16024911, PubMed:11015575, PubMed:16971496). 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:18762277, PubMed:18599737, PubMed:16971496).

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:21049984, PubMed:18762277)

Anti-Carboxylesterase 1 / CES1 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](#)

Anti-Carboxylesterase 1 / CES1 Antibody - Images

Anti-Carboxylesterase 1 / CES1 Antibody - Citations

- [Insulin transcriptionally down-regulates carboxylesterases through pregnane X receptor in an Akt-dependent manner.](#)