

**CES1 antibody - C-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI11954****Specification**

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**CES1 antibody - C-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">P23141</a>
Other Accession	<a href="#">NM_001025194</a> , <a href="#">NP_001020365</a>
Reactivity	Human, Mouse, Rat, Rabbit, Horse, Bovine, Dog
Predicted Host	Human, Bovine, Dog
Clonality	Rabbit
Calculated MW	Polyclonal 62kDa KDa

**CES1 antibody - C-terminal region - Additional Information****Gene ID 1066**

Alias Symbol **CEH, CES2, HMSE, HMSE1, SES1, REH, TGH, ACAT, PCE-1**

**Other Names**

Liver carboxylesterase 1, Acyl-coenzyme A:cholesterol acyltransferase, ACAT, Brain carboxylesterase hBr1, Carboxylesterase 1, CE-1, hCE-1, 3.1.1.1, Cocaine carboxylesterase, Egasyn, HMSE, Methylumbelliferyl-acetate deacetylase 1, 3.1.1.56, Monocyte/macrophage serine esterase, Retinyl ester hydrolase, REH, Serine esterase 1, Triacylglycerol hydrolase, TGH, CES1, CES2, SES1

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-CES1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

CES1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

**CES1 antibody - C-terminal region - 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:<a href="http://www.uniprot.org/citations/18762277" target="\_blank">18762277</a>, PubMed:<a href="http://www.uniprot.org/citations/7980644" target="\_blank">7980644</a>, PubMed:<a href="http://www.uniprot.org/citations/9169443" target="\_blank">9169443</a>, PubMed:<a href="http://www.uniprot.org/citations/9490062" target="\_blank">9490062</a>). Hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty acyl-CoA ester (PubMed:<a href="http://www.uniprot.org/citations/18762277" target="\_blank">18762277</a>, PubMed:<a href="http://www.uniprot.org/citations/7980644" target="\_blank">7980644</a>, PubMed:<a href="http://www.uniprot.org/citations/9169443" target="\_blank">9169443</a>, PubMed:<a href="http://www.uniprot.org/citations/9490062" target="\_blank">9490062</a>). Hydrolyzes the methyl ester group of cocaine to form benzoylecgonine (PubMed:<a href="http://www.uniprot.org/citations/7980644" target="\_blank">7980644</a>). Catalyzes the transesterification of cocaine to form cocaethylene (PubMed:<a href="http://www.uniprot.org/citations/7980644" target="\_blank">7980644</a>). Displays fatty acid ethyl ester synthase activity, catalyzing the ethyl esterification of oleic acid to ethyloleate (PubMed:<a href="http://www.uniprot.org/citations/7980644" target="\_blank">7980644</a>). Converts monoacylglycerides to free fatty acids and glycerol. Hydrolyzes of 2-arachidonoylglycerol and prostaglandins (PubMed:<a href="http://www.uniprot.org/citations/21049984" target="\_blank">21049984</a>). 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:<a href="http://www.uniprot.org/citations/11015575" target="\_blank">11015575</a>, PubMed:<a href="http://www.uniprot.org/citations/16024911" target="\_blank">16024911</a>, PubMed:<a href="http://www.uniprot.org/citations/16971496" target="\_blank">16971496</a>, PubMed:<a href="http://www.uniprot.org/citations/18762277" target="\_blank">18762277</a>). 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:<a href="http://www.uniprot.org/citations/16971496" target="\_blank">16971496</a>, PubMed:<a href="http://www.uniprot.org/citations/18599737" target="\_blank">18599737</a>, PubMed:<a href="http://www.uniprot.org/citations/18762277" target="\_blank">18762277</a>).

### 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)

## CES1 antibody - C-terminal region - 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](#)

## CES1 antibody - C-terminal region - Images





70 kDa  
60 kDa  
48 kDa  
36 kDa

WB Suggested Anti-CES1 Antibody Titration: 1.25 $\mu$ g/ml

Positive Control: PANC1 cell lysate

CES1 is supported by BioGPS gene expression data to be expressed in PANC1

### **CES1 antibody - C-terminal region - References**

Alam, M., (2006) J. Lipid Res. 47 (2), 375-383  
Reconstitution and Storage: For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.