

# CES1 antibody - C-terminal region

Rabbit Polyclonal Antibody

Catalog # AI11954

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P23141</a>
<b>Other Accession</b>	<a href="#">NM_001025194</a> , <a href="#">NP_001020365</a>
<b>Reactivity</b>	Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine
<b>Predicted</b>	Human, Dog, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	62521

## Additional Information

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<b>Gene ID</b>	1066
<b>Alias Symbol</b> <b>Other Names</b>	CEH, CES2, HMSE, HMSE1, SES1, REH, TGH, ACAT, PCE-1 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
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	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.
<b>Precautions</b>	CES1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CES1 ( <a href="#">HGNC:1863</a> )
<b>Synonyms</b>	CES2, SES1
<b>Function</b>	Involved in the detoxification of xenobiotics and in the activation of ester and amide prodrugs (PubMed: <a href="#">18762277</a> , PubMed: <a href="#">7980644</a> , PubMed: <a href="#">9169443</a> , PubMed: <a href="#">9490062</a> ). Hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty acyl-CoA ester (PubMed: <a href="#">18762277</a> , PubMed: <a href="#">7980644</a> , PubMed: <a href="#">9169443</a> , PubMed: <a href="#">9490062</a> ). 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:[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

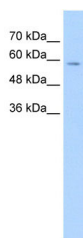
#### Tissue Location

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

## References

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

## Images



WB Suggested Anti-CES1 Antibody Titration: 1.25 µg/ml  
 Positive Control: PANC1 cell lysate  
 CES1 is supported by BioGPS gene expression data to be expressed in PANC1

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.