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

Specification

CES1 antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	P23141
Other Accession	NM_001025194, NP_001020365
Reactivity	**Human, Mouse, Rat, Rabbit, Horse, Bovine, Dog**
Predicted	**Human, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**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:18762277, PubMed:7980644, PubMed:9169443, PubMed: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 cholesterols 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)

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 Cytomety
- Cell Culture

CES1 antibody - C-terminal region - Images

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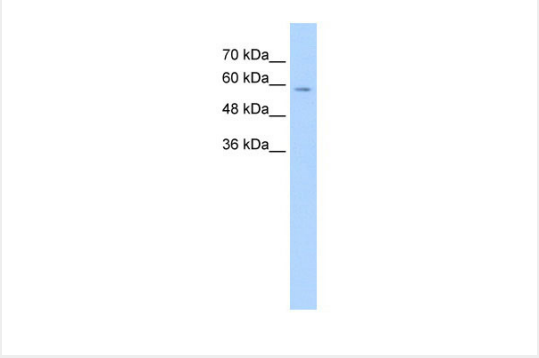

WB Suggested Anti-CES1 Antibody Titration: 1.25µg/ml
Positive Control: PANC1 cell lysate
CES1 is supported by BioGPS gene expression data to be expressed in PANC1

CES1 antibody - C-terminal region - References

Alam,M., (2006) J. Lipid Res. 47 (2), 375-383Reconstitution 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.