

**CES2 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP10661c****Specification**

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**CES2 Antibody (Center) Blocking peptide - Product Information**Primary Accession [O00748](#)**CES2 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 8824**Other Names**

Cocaine esterase, Carboxylesterase 2, CE-2, hCE-2, Methylumbelliferyl-acetate deacetylase 2, CES2, ICE

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CES2 Antibody (Center) Blocking peptide - Protein Information****Name** CES2 ([HGNC:1864](#))**Synonyms** ICE**Function**

Involved in the detoxification of xenobiotics and in the activation of ester and amide prodrugs (PubMed:<a href="http://www.uniprot.org/citations/9169443" target="\_blank">9169443</a>). Shows high catalytic efficiency for hydrolysis of cocaine, 4-methylumbelliferyl acetate, heroin and 6-monoacetylmorphine (PubMed:<a href="http://www.uniprot.org/citations/9169443" target="\_blank">9169443</a>). Hydrolyzes aspirin, substrates with large alcohol group and small acyl group and endogenous lipids such as triacylglycerol (PubMed:<a href="http://www.uniprot.org/citations/28677105" target="\_blank">28677105</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>).

**Cellular Location**

Endoplasmic reticulum lumen

**Tissue Location**

Preferentially expressed in intestine with moderate expression in liver. Within the intestine, highest expression is found in small intestine with lower expression in colon and rectum

### **CES2 Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **CES2 Antibody (Center) Blocking peptide - Images**

### **CES2 Antibody (Center) Blocking peptide - Background**

CES2 is a member of the carboxylesterase large family. The family members are responsible for the hydrolysis or transesterification of various xenobiotics, such as cocaine and heroin, and endogenous substrates with ester, thioester, or amide bonds. They may participate in fatty acyl and cholesterol ester metabolism, and may play a role in the blood-brain barrier system. The protein encoded by this gene is the major intestinal enzyme and functions in intestine drug clearance.

### **CES2 Antibody (Center) Blocking peptide - References**

Holmes, R.S., et al. Mamm. Genome 21 (9-10), 427-441 (2010) ; Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Howard, T.D., et al. Environ. Health Perspect. 118(10):1395-1399(2010) Hatfield, M.J., et al. Br. J. Pharmacol. 160(8):1916-1928(2010) Holmes, R.S., et al. Genetica 138(7):695-708(2010)