

**CYP2C8 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7995a****Specification**

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**CYP2C8 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P10632](#)**CYP2C8 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 1558**Other Names**

Cytochrome P450 2C8, CYP11C8, Cytochrome P450 11C2, Cytochrome P450 MP-12, Cytochrome P450 MP-20, Cytochrome P450 form 1, S-mephenytoin 4-hydroxylase, CYP2C8

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7995a](/products/AP7995a) was selected from the N-term region of human CYP2C8. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**CYP2C8 Antibody (N-term) Blocking Peptide - Protein Information****Name** CYP2C8 {ECO:0000303|PubMed:7574697, ECO:0000312|HGNC:HGNC:2622}**Function**

A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins (PubMed:[11093772](http://www.uniprot.org/citations/11093772), PubMed:[14559847](http://www.uniprot.org/citations/14559847), PubMed:[15766564](http://www.uniprot.org/citations/15766564), PubMed:[19965576](http://www.uniprot.org/citations/19965576), PubMed:[7574697](http://www.uniprot.org/citations/7574697)). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase) (PubMed:[11093772](http://www.uniprot.org/citations/11093772), PubMed:

href="http://www.uniprot.org/citations/14559847" target="\_blank">14559847</a>, PubMed:<a href="http://www.uniprot.org/citations/15766564" target="\_blank">15766564</a>, PubMed:<a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed:<a href="http://www.uniprot.org/citations/7574697" target="\_blank">7574697</a>). Primarily catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) with a preference for the last double bond (PubMed:<a href="http://www.uniprot.org/citations/15766564" target="\_blank">15766564</a>, PubMed:<a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed:<a href="http://www.uniprot.org/citations/7574697" target="\_blank">7574697</a>). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes all trans-retinoic acid toward its 4-hydroxylated form (PubMed:<a href="http://www.uniprot.org/citations/11093772" target="\_blank">11093772</a>). Displays 16-alpha hydroxylase activity toward estrogen steroid hormones, 17beta-estradiol (E2) and estrone (E1) (PubMed:<a href="http://www.uniprot.org/citations/14559847" target="\_blank">14559847</a>). Plays a role in the oxidative metabolism of xenobiotics. It is the principal enzyme responsible for the metabolism of the anti-cancer drug paclitaxel (taxol) (PubMed:<a href="http://www.uniprot.org/citations/26427316" target="\_blank">26427316</a>).

#### **Cellular Location**

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

#### **CYP2C8 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **CYP2C8 Antibody (N-term) Blocking Peptide - Images**

#### **CYP2C8 Antibody (N-term) Blocking Peptide - Background**

CYP2C8 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by phenobarbital. The enzyme is known to metabolize many xenobiotics, including the anticonvulsive drug mephenytoin, benzo(a)pyrene, 7-ethoxycoumarin, and the anti-cancer drug taxol.

#### **CYP2C8 Antibody (N-term) Blocking Peptide - References**

Adjei,G.O., Antimicrob. Agents Chemother. 52 (12), 4400-4406 (2008)Aquilante,C.L., Hum. Genomics 3 (1), 7-16 (2008)Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)