

**CYP8A1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7997a****Specification**

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**CYP8A1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q16647](#)**CYP8A1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 5740**Other Names**

Prostacyclin synthase, Prostaglandin I2 synthase, PTGIS, CYP8, CYP8A1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7997a](/products/AP7997a) was selected from the N-term region of human CYP8A1. 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.

**CYP8A1 Antibody (N-term) Blocking Peptide - Protein Information****Name** PTGIS**Synonyms** CYP8, CYP8A1**Function**

Catalyzes the biosynthesis and metabolism of eicosanoids. Catalyzes the isomerization of prostaglandin H2 to prostacyclin (= prostaglandin I2), a potent mediator of vasodilation and inhibitor of platelet aggregation (PubMed: [18032380](http://www.uniprot.org/citations/18032380), PubMed: [25623425](http://www.uniprot.org/citations/25623425), PubMed: [12372404](http://www.uniprot.org/citations/12372404), PubMed: [15115769](http://www.uniprot.org/citations/15115769)). Additionally, displays dehydratase activity, toward hydroperoxyeicosatetraenoates (HPETEs), especially toward (15S)-hydroperoxy-(5Z,8Z,11Z,13E)-eicosatetraenoate (15(S)- HPETE) (PubMed: [17459323](http://www.uniprot.org/citations/17459323)).

**Cellular Location**

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q29626}; Single-pass membrane protein

**Tissue Location**

Widely expressed; particularly abundant in ovary, heart, skeletal muscle, lung and prostate

**CYP8A1 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**CYP8A1 Antibody (N-term) Blocking Peptide - Images****CYP8A1 Antibody (N-term) Blocking Peptide - Background**

CYP8A1 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. However, this protein is considered a member of the cytochrome P450 superfamily on the basis of sequence similarity rather than functional similarity. This endoplasmic reticulum membrane protein catalyzes the conversion of prostglandin H2 to prostacyclin (prostaglandin I2), a potent vasodilator and inhibitor of platelet aggregation. An imbalance of prostacyclin and its physiological antagonist thromboxane A2 contribute to the development of myocardial infarction, stroke, and atherosclerosis.

**CYP8A1 Antibody (N-term) Blocking Peptide - References**

Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)