

**CYP8A1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7997B**

**Specification**

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**CYP8A1 Antibody (C-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">Q16647</a>
Other Accession	<a href="#">Q29626</a>
Reactivity	<b>Human</b>
Predicted	<b>Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>57104</b>
Antigen Region	<b>472-500</b>

**CYP8A1 Antibody (C-term) - Additional Information**

**Gene ID** 5740

**Other Names**

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

**Target/Specificity**

This CYP8A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 472-500 amino acids from the C-terminal region of human CYP8A1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CYP8A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CYP8A1 Antibody (C-term) - 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:[12372404](#), PubMed:[15115769](#), PubMed:[18032380](#), PubMed:[25623425](#)). Additionally, displays dehydratase activity, toward hydroperoxyeicosatetraenoates (HPETEs), especially toward (15S)-hydroperoxy-(5Z,8Z,11Z,13E)-eicosatetraenoate (15(S)- HPETE) (PubMed:[17459323](#)).

### Cellular Location

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

### Tissue Location

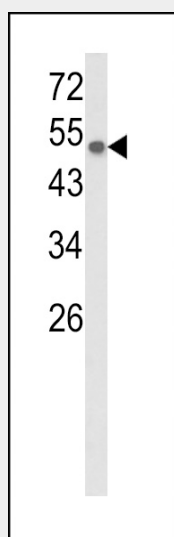
Widely expressed; particularly abundant in ovary, heart, skeletal muscle, lung and prostate

### CYP8A1 Antibody (C-term) - Protocols

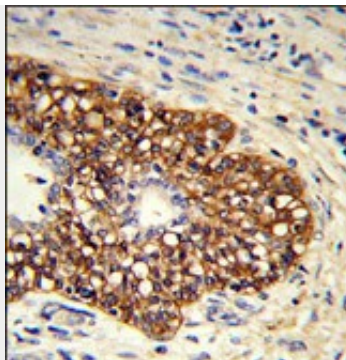
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CYP8A1 Antibody (C-term) - Images



Western blot analysis of CYP8A1 Antibody (C-term) (Cat. #AP7997b) in CEM cell line lysates (35ug/lane). CYP8A1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human prostate carcinoma reacted with CYP8A1 Antibody (C-term) (Cat. #AP7997b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

#### **CYP8A1 Antibody (C-term) - 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 (C-term) - References**

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