

**CYP8A1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7997A****Specification**

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

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q16647</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57104
Antigen Region	30-61

**CYP8A1 Antibody (N-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 30-61 amino acids from the N-terminal region of human CYP8A1.

**Dilution**

WB~~1:1000

IHC-P~~1:10~50

**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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CYP8A1 Antibody (N-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:[18032380](#), PubMed:[25623425](#), PubMed:[12372404](#), PubMed:[15115769](#)). 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**

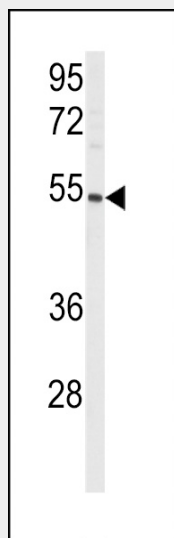
Widely expressed; particularly abundant in ovary, heart, skeletal muscle, lung and prostate

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

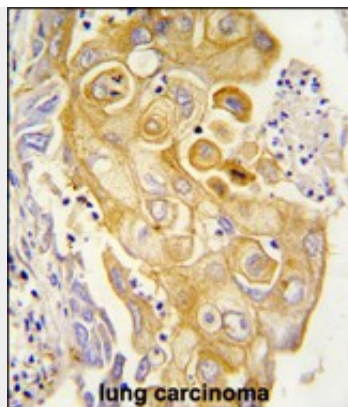
Provided below are standard protocols that you may find useful for product applications.

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

**CYP8A1 Antibody (N-term) - Images**



Western blot analysis of anti-CYP8A1 Antibody (N-term) (Cat.#AP7997a) in mouse lung tissue lysates (35ug/lane). CYP8A1(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CYP8A1 antibody (N-term) , 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 (N-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 (N-term) - References**

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