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CYP8A1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7997B

Specification

CYP8A1 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q16647
Other Accession	Q29626
Reactivity	**Human**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**57104**
Antigen Region	**472-500**

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: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

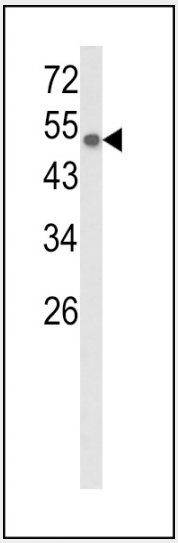
Tissue Location
Widely expressed; particularly abundant in ovary, heart, skeletal muscle, lung and prostate

CYP8A1 Antibody (C-term) - Protocols

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

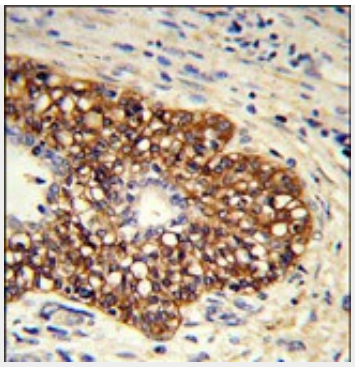
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.

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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)