



href="http://www.uniprot.org/citations/12865317" target="\_blank">12865317</a>, PubMed:<a href="http://www.uniprot.org/citations/14559847" target="\_blank">14559847</a>, PubMed:<a href="http://www.uniprot.org/citations/15041462" target="\_blank">15041462</a>, PubMed:<a href="http://www.uniprot.org/citations/15805301" target="\_blank">15805301</a>, PubMed:<a href="http://www.uniprot.org/citations/18577768" target="\_blank">18577768</a>, PubMed:<a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed:<a href="http://www.uniprot.org/citations/20972997" target="\_blank">20972997</a>). Catalyzes the hydroxylation of carbon-hydrogen bonds. Exhibits high catalytic activity for the formation of hydroxystrogens from estrone (E1) and 17beta-estradiol (E2), namely 2-hydroxy E1 and E2, as well as D-ring hydroxylated E1 and E2 at the C15-alpha and C16- alpha positions (PubMed:<a href="http://www.uniprot.org/citations/11555828" target="\_blank">11555828</a>, PubMed:<a href="http://www.uniprot.org/citations/12865317" target="\_blank">12865317</a>, PubMed:<a href="http://www.uniprot.org/citations/14559847" target="\_blank">14559847</a>, PubMed:<a href="http://www.uniprot.org/citations/15805301" target="\_blank">15805301</a>). Displays different regioselectivities for polyunsaturated fatty acids (PUFA) hydroxylation (PubMed:<a href="http://www.uniprot.org/citations/15041462" target="\_blank">15041462</a>, PubMed:<a href="http://www.uniprot.org/citations/18577768" target="\_blank">18577768</a>). Catalyzes the epoxidation of double bonds of certain PUFA (PubMed:<a href="http://www.uniprot.org/citations/15041462" target="\_blank">15041462</a>, PubMed:<a href="http://www.uniprot.org/citations/19965576" target="\_blank">19965576</a>, PubMed:<a href="http://www.uniprot.org/citations/20972997" target="\_blank">20972997</a>). Converts arachidonic acid toward epoxyeicosatrienoic acid (EET) regioisomers, 8,9-, 11,12-, and 14,15-EET, that function as lipid mediators in the vascular system (PubMed:<a href="http://www.uniprot.org/citations/20972997" target="\_blank">20972997</a>). Displays an absolute stereoselectivity in the epoxidation of eicosapentaenoic acid (EPA) producing the 17(R),18(S) enantiomer (PubMed:<a href="http://www.uniprot.org/citations/15041462" target="\_blank">15041462</a>). May play an important role in all-trans retinoic acid biosynthesis in extrahepatic tissues. Catalyzes two successive oxidative transformation of all-trans retinol to all-trans retinal and then to the active form all-trans retinoic acid (PubMed:<a href="http://www.uniprot.org/citations/10681376" target="\_blank">10681376</a>). May also participate in eicosanoids metabolism by converting hydroperoxide species into oxo metabolites (lipoxygenase-like reaction, NADPH-independent) (PubMed:<a href="http://www.uniprot.org/citations/21068195" target="\_blank">21068195</a>).

#### Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P00185}; Peripheral membrane protein {ECO:0000250|UniProtKB:P00185}. Mitochondrion inner membrane {ECO:0000250|UniProtKB:P00185}; Peripheral membrane protein {ECO:0000250|UniProtKB:P00185}. Microsome membrane {ECO:0000250|UniProtKB:P00185}; Peripheral membrane protein {ECO:0000250|UniProtKB:P00185}. Cytoplasm {ECO:0000250|UniProtKB:P00185}

#### Tissue Location

Lung, lymphocytes and placenta.

### Cytochrome P450 1A1/2 Antibody - 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](#)

### **Cytochrome P450 1A1/2 Antibody - Images**

### **Cytochrome P450 1A1/2 Antibody - Background**

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics.

### **Cytochrome P450 1A1/2 Antibody - References**

Jaiswal A.K.,et al.Nucleic Acids Res. 13:4503-4520(1985).

Jaiswal A.K.,et al.Science 228:80-83(1985).

Kawajiri K.,et al.Eur. J. Biochem. 159:219-225(1986).

Corchero J.,et al.Pharmacogenetics 11:1-6(2001).

Graebisch C.,et al.Submitted (FEB-2006) to the EMBL/GenBank/DDBJ databases.