

Anti-CYP1A1 Antibody
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18165**Specification**

Anti-CYP1A1 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P04798
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	58165

Anti-CYP1A1 Antibody - Additional Information**Gene ID 1543**Alias Symbol **CYP1A1****Other Names**

CYP1A1, AHH, Aryl hydrocarbon hydroxylase, Cytochrome P450-C, CP11, CYPIA1, Cytochrome P450 form 6, Cytochrome p450 ia1, Cytochrome P450 1A1, Cytochrome P450-P1, p1-450, p450-C, p450DX, CYP1

Target/Specificity

Human CYP1A1

Reconstitution & Storage

Affinity purified

Precautions

Anti-CYP1A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-CYP1A1 Antibody - Protein Information**Name** CYP1A1 {ECO:0000303|PubMed:10681376, ECO:0000312|HGNC:HGNC:2595}**Function**

A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins (PubMed:11555828, PubMed:14559847, PubMed:12865317, PubMed:15805301, PubMed:15041462, PubMed:18577768, PubMed:19965576, PubMed:<a

[20972997](http://www.uniprot.org/citations/20972997), PubMed: [10681376](http://www.uniprot.org/citations/10681376)). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase) (PubMed: [11555828](http://www.uniprot.org/citations/11555828), PubMed: [14559847](http://www.uniprot.org/citations/14559847), PubMed: [12865317](http://www.uniprot.org/citations/12865317), PubMed: [15805301](http://www.uniprot.org/citations/15805301), PubMed: [15041462](http://www.uniprot.org/citations/15041462), PubMed: [18577768](http://www.uniprot.org/citations/18577768), PubMed: [19965576](http://www.uniprot.org/citations/19965576), PubMed: [20972997](http://www.uniprot.org/citations/20972997), PubMed: [10681376](http://www.uniprot.org/citations/10681376)). Catalyzes the hydroxylation of carbon-hydrogen bonds. Exhibits high catalytic activity for the formation of hydroxysteroids 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: [11555828](http://www.uniprot.org/citations/11555828), PubMed: [14559847](http://www.uniprot.org/citations/14559847), PubMed: [12865317](http://www.uniprot.org/citations/12865317), PubMed: [15805301](http://www.uniprot.org/citations/15805301)). Displays different regioselectivities for polyunsaturated fatty acids (PUFA) hydroxylation (PubMed: [15041462](http://www.uniprot.org/citations/15041462), PubMed: [18577768](http://www.uniprot.org/citations/18577768)). Catalyzes the epoxidation of double bonds of certain PUFA (PubMed: [15041462](http://www.uniprot.org/citations/15041462), PubMed: [19965576](http://www.uniprot.org/citations/19965576), PubMed: [20972997](http://www.uniprot.org/citations/20972997)). 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: [20972997](http://www.uniprot.org/citations/20972997)). Displays an absolute stereoselectivity in the epoxidation of eicosapentaenoic acid (EPA) producing the 17(R),18(S) enantiomer (PubMed: [15041462](http://www.uniprot.org/citations/15041462)). 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: [10681376](http://www.uniprot.org/citations/10681376)). May also participate in eicosanoids metabolism by converting hydroperoxide species into oxo metabolites (lipoxygenase-like reaction, NADPH-independent) (PubMed: [21068195](http://www.uniprot.org/citations/21068195)).

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.

Anti-CYP1A1 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](#)

Anti-CYP1A1 Antibody - Images