

产品名称: Cytochrome P450 1A2 (8B7) Rabbit Monoclonal Antibody
产品货号: AMRe09712



产品概述 (Summary)

产品名称 (Production Name)	Cytochrome P450 1A2 (8B7) Rabbit Monoclonal Antibody
描述 (Description)	Recombinant rabbit monoclonal antibody
宿主 (Host)	Rabbit
应用 (Application)	WB, ICC/IF, FC
种属反应性 (Reactivity)	Human

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Monoclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	CYP1A2
别名 (Alternative Names)	CP12; CYP1A2; CYP1A2; P3 450; P450 4; P450 P3;
基因 ID (Gene ID)	1544.0
蛋白 ID (SwissProt ID)	P05177.

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:1000-1:5000, ICC/IF 1:200-1:500, FC 1:50-1:200
蛋白分子量 (Molecular Weight)	58kDa

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研究背景 (Background)

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins (PubMed:[9435160](http://www.uniprot.org/citations/9435160), PubMed:[10681376](http://www.uniprot.org/citations/10681376), PubMed:[11555828](http://www.uniprot.org/citations/11555828), PubMed:[12865317](http://www.uniprot.org/citations/12865317), PubMed:[19965576](http://www.uniprot.org/citations/19965576)). 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:[9435160](http://www.uniprot.org/citations/9435160), PubMed:[10681376](http://www.uniprot.org/citations/10681376), PubMed:[11555828](http://www.uniprot.org/citations/11555828), PubMed:[12865317](http://www.uniprot.org/citations/12865317), PubMed:[19965576](http://www.uniprot.org/citations/19965576)). Catalyzes the hydroxylation of carbon-hydrogen bonds (PubMed:[11555828](http://www.uniprot.org/citations/11555828), PubMed:[12865317](http://www.uniprot.org/citations/12865317)). Exhibits high catalytic activity for the formation of hydroxyestrogens from estrone (E1) and 17beta- estradiol (E2), namely 2-hydroxy E1 and E2 (PubMed:[11555828](http://www.uniprot.org/citations/11555828), PubMed:[12865317](http://www.uniprot.org/citations/12865317)). Metabolizes cholesterol toward 25-hydroxycholesterol, a physiological regulator of cellular cholesterol homeostasis (PubMed:[21576599](http://www.uniprot.org/citations/21576599)). May act as a major enzyme for all-trans retinoic acid biosynthesis in the liver. 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)). Primarily catalyzes stereoselective epoxidation of the last double bond of polyunsaturated fatty acids (PUFA), displaying a strong preference for the (R,S) stereoisomer (PubMed:[19965576](http://www.uniprot.org/citations/19965576)). Catalyzes bisallylic hydroxylation and omega-1 hydroxylation of PUFA (PubMed:[9435160](http://www.uniprot.org/citations/9435160)). 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)). Plays a role in the oxidative metabolism of xenobiotics. Catalyzes the N-hydroxylation of heterocyclic amines and the O-deethylation of phenacetin (PubMed:[14725854](http://www.uniprot.org/citations/14725854)). Metabolizes caffeine via N3-demethylation (Probable).

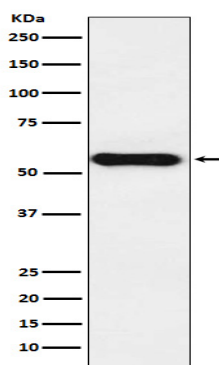
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研究领域 (Research Area)

Caffeine metabolism; Tryptophan metabolism; Linoleic acid metabolism; Retinol metabolism; Metabolism of xenobiotics by cytochrome P450; Drug metabolism;

图片 (Image Data)



Western blot analysis of Cytochrome P450 1A2 expression in Caco2 cell lysate.

注意事项 (Note)

For research use only .