Recombinant Human CYP1A2, MYC/DDK-tagged

Cat. No. CYP1A2-150H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CYP1A2 fused with C-terminal MYC/DDK, was expressed in HEK293 Cells.
Species	Human
Source	HEK293
Description	This gene encodes 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. The protein encoded by this gene localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme''s endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. Other xenobiotic substrates for this enzyme include caffeine, aflatoxin B1, and acetaminophen. The transcript from this gene contains four Alu sequences flanked by direct repeats in the 3'' untranslated region.
Molecular Mass	58.2 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Storage	Store at -80C. Avoid repeated freeze-thaw cycles. Stable for at least 3 months from receipt of products under proper storage and handling conditions.

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Concentration	>50 ug/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	CYP1A2 cytochrome P450, family 1, subfamily A, polypeptide 2 [Homo sapiens (human)]
Official Symbol	CYP1A2
Synonyms	CYP1A2; CP12; P3-450; P450(PA); cytochrome P450, family 1, subfamily A, polypeptide 2; cytochrome P450 1A2; CYPIA2; P450 form 4; cytochrome P450 4; cytochrome P(3)450; cytochrome P450-P3; dioxin-inducible P3-450; microsomal monooxygenase; xenobiotic monooxygenase; aryl hydrocarbon hydroxylase; flavoprotein-linked monooxygenase; cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 2; EC 1.14.14.1
Gene ID	1544
mRNA Refseq	NM_000761
Protein Refseq	NP_000752
MIM	124060
UniProt ID	P05177
Chromosome Location	15q24.1

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Pathway	Aflatoxin B1 metabolism; Arachidonic acid metabolism; Caffeine metabolism
Function	caffeine oxidase activity; monooxygenase activity; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen

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