

## Recombinant Human CYP2A6, MYC/DDK-tagged

Cat. No. CYP2A6-126H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human CYP2A6, fused with C-terminal MYC/DDK, was expressed in HEK293 cells.

**Species** Human

**Source** HEK293

**Description** This gene, CYP2A6, 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. This protein localizes to the endoplasmic reticulum and its expression is induced by phenobarbital. The enzyme is known to hydroxylate coumarin, and also metabolizes nicotine, aflatoxin B1, nitrosamines, and some pharmaceuticals. Individuals with certain allelic variants are said to have a poor metabolizer phenotype, meaning they do not efficiently metabolize coumarin or nicotine. This gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. The gene was formerly referred to as CYP2A3; however, it has been renamed CYP2A6.

**Molecular Mass** 56.3 kDa

**Purity** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Concentration** >50 ug/mL as determined by microplate BCA method

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**Storage Buffer** 25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

## GENE INFORMATION

**Gene Name** [CYP2A6 cytochrome P450, family 2, subfamily A, polypeptide 6 \[ Homo sapiens \]](#)

**Official Symbol** CYP2A6

**Synonyms** CYP2A6; CPA6; CYP2A; CYP2A3; P450PB; CYP1IA6; P450C2A; cytochrome P450, family 2, subfamily A, polypeptide 6; cytochrome P450 2A6; cytochrome P450(I); cytochrome P450 IIA3; coumarin 7-hydroxylase; xenobiotic monooxygenase; 1,4-cineole 2-exo-monooxygenase; flavoprotein-linked monooxygenase; cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 6; EC 1.14.14.1

**Gene ID** [1548](#)

**mRNA Refseq** [NM\\_000762](#)

**Protein Refseq** [NP\\_000753](#)


**MIM** [122720](#)

**UniProt ID** P11509

**Chromosome Location** 19q13.2

**Pathway** Biological oxidations; Caffeine metabolism; Chemical carcinogenesis

**Function** coumarin 7-hydroxylase activity; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one

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donor, and incorporation of one atom of oxygen; enzyme binding

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