

Recombinant Full Length Human CYP2D6 Protein, Tag Free

Cat. No. CYP2D6-01HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human full length Cytochrome P450 2D6 (CYP2D6), identical with the antigen called "liver/kidney microsomal antigen 1" without tag was expressed in baculovirus (Autographa californica multiple nuclear polyhedrosis virus; AcMNPV) infection of Spodoptera frugiperda Sf9 insect cells.
Species	Human
Source	Baculovirus
ProteinLength	1-497 aa
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. This protein localizes to the endoplasmic reticulum and is known to metabolize as many as 25% of commonly prescribed drugs. Its substrates include antidepressants, antipsychotics, analgesics and antitussives, beta adrenergic blocking agents, antiarrhythmics and antiemetics. The gene is highly polymorphic in the human population; certain alleles result in the poor metabolizer phenotype, characterized by a decreased ability to metabolize the enzyme's substrates. Some individuals with the poor metabolizer phenotype have no functional protein since they carry 2 null alleles whereas in other individuals the gene is absent. This gene can vary in copy number and individuals with the ultrarapid metabolizer phenotype can have 3 or more active copies of the gene. Alternatively spliced transcript variants encoding different

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	isoforms have been found for this gene.
Tag	Non
Calculated isoelectric point	pH 6.64
Molecular Mass	56 kDa
Immunological function	Binds IgG-type human auto-antibodies.
Immunological tests	Standard ELISA test (checkerboard analysis of positive/negative samples); immunodot analyses with positive/negative samples.
Biochemical tests	SDS-PAGE (purity > 80%); Western blot with i: monoclonal anti-LKM 1 antibody; ii: anti-LKM 1 auto-antibody positive sample.
Storage	At -70 centigrade or below. Repeated freeze/thaw cycles should be avoided.
Storage Buffer	Neutral to slightly alkaline pH and 15% glycerol as cryoprotective agent; being a peripheral membrane protein LKM 1 requires addition of detergent for solubility.
Concentration	0.35-0.6 µg/mL (depending on the type of ELISA plate and coating buffer). Suitable for labeling of functional groups.

GENE INFORMATION

Gene Name	CYP2D6 cytochrome P450 family 2 subfamily D member 6 (gene/pseudogene) [Homo sapiens (human)]
Official Symbol	CYP2D6

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Synonyms

CYP2D6; cytochrome P450 family 2 subfamily D member 6 (gene/pseudogene); CPD6; CYP2D; CYP2DL1; CYP2D6; P450C2D; P450DB1; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; P450-DB1; cytochrome P450 2D6; cholesterol 25-hydroxylase; cytochrome P450, family 2, subfamily D, polypeptide 6; cytochrome P450, family 2, subfamily D, polypeptide 7 pseudogene 2; cytochrome P450, family 2, subfamily D, polypeptide 8 pseudogene 2; cytochrome P450, subfamily II (debrisoquine, sparteine, etc., -metabolising), polypeptide 7 pseudogene 2; cytochrome P450, subfamily IID (debrisoquine, sparteine, etc., -metabolising), polypeptide 8 pseudogene 2; cytochrome P450, subfamily IID (debrisoquine, sparteine, etc., -metabolizing), polypeptide 6; cytochrome P450, subfamily IID (debrisoquine, sparteine, etc., -metabolizing)-like 1; cytochrome P450-DB1; debrisoquine 4-hydroxylase; flavoprotein-linked monooxygenase; microsomal monooxygenase; nonfunctional cytochrome P450 2D6; xenobiotic monooxygenase; EC 1.14.14.1

Gene ID

1565

mRNA Refseq

NM_000106

Protein Refseq

NP_000097

MIM

124030

UniProt ID

P10635

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