

Recombinant Full Length Human CYP2D6 Protein, C-Flag-tagged

Cat. No. CYP2D6-1918HFL Lot. No. (See product label)

SPECIFICATION

Product Overview

Recombinant Full Length Human CYP2D6 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.

Species

Human

Source

Mammalian Cells

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 isoforms have been found for this gene.

Form

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

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 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	49.8 kDa
AA Sequence	<p>MGLEALVPLAMIVAIFLLLVDLMHRRQRWAARYPPGPLPLPGLGNLLHVDFQNTPYC FDQLRRRFGDVFS LQLAWTPVVVLNGLAAVREALVTHGEDTADRPPVPITQILGFG PRSQGRPFRPNGLLDKAVSNVIASLTC GRRFEYDDPRFLRLLDLAQEGLKEESGFL REVLNAVVPVLLHIPALAGKVLRFQKAFLTQLDELLTEHRMT WDPAQPPRDLTEAFLA EMEKAKGNPESSFNDENLCIVVADLFSAGMVTSTTLAWGLLLMILHPDVQRRV QQ EIDDVIGQVRRPEMGDQAHMPYTTAVIHEVQRFGDIVPLGVTHMTSRDIEVQGFRI KGTTLITNLSS VLKDEAVWEKPFRRFHPEHFLDAQGHFVKPEAFLPFSAGRRACLGE PLARMELFFFTSLLQHFSFSVPTG QPRPSHHGVFAFLVTPSPYELCAVPR TRTRP LEQKLISEEDLAANDILDYKDDDDKV</p>
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, P450, Transmembrane
Protein Pathways	Drug metabolism - cytochrome P450
Full Length	Full L.

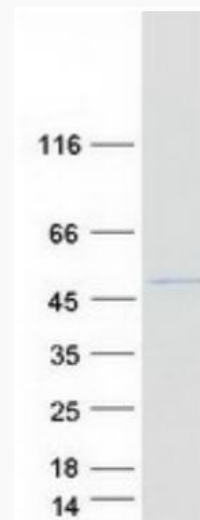
GENE INFORMATION

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Gene Name	CYP2D6 cytochrome P450 family 2 subfamily D member 6 [Homo sapiens (human)]
Official Symbol	CYP2D6
Synonyms	CPD6; CYP2D; CYP2DL1; CYP1ID6; P450C2D; P450DB1; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; P450-DB1
Gene ID	1565
mRNA Refseq	NM_001025161.3
Protein Refseq	NP_001020332.2
MIM	124030
UniProt ID	P10635



Coomassie blue staining of purified CYP2D6 protein.

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