

Product datasheet for PH321660

Cytochrome P450 2D6 (CYP2D6) (NM_001025161) Human Mass Spec Standard

Product data:

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| Product Type: | Mass Spec Standards |
| Description: | CYP2D6 MS Standard C13 and N15-labeled recombinant protein (NP_001020332) |
| Species: | Human |
| Expression Host: | HEK293 |
| Expression cDNA Clone or AA Sequence: | RC221660 |
| Predicted MW: | 50.1 kDa |
| Protein Sequence: | >RC221660 protein sequence Red=Cloning site Green=Tags(s) |

MGLEALVPLAMIVAIIFLLLVDLMHRQRWAARYPPGPLPLPGLGNLLHVDFQNTPYCFDQLRRRFGDVFS
LQLAWTPVVVLNGLAAVREALVTHGEDTADRPPVPITQILGFGPRSQGRPFNPGLLDKAVSNVIASLTC
GRRFEYDDPRFLRLDLAQEGLKEESGFLREVLNAVPLLHHPALAGKVLRFQKAFLTQLDELLTEHRMT
WDPAQPPRDLTEAFLAEMEKAKGNPESSFNDENLCIVVADLFSAGMVTSTTLAWGLLLMILHPDVQRRV
QQEIDDDVIGVRRPEMGDQAHMPYTTAVIHEVQRFQDIVPLGVTHMTRSDIEVQGFRIIPKGTTLITNLSS
VLKDEAVWEKPFRRFHEHFLDAQGHFVKPEAFLPFSAGRRACLGEPLARMELFLFFTSLLQHFSSVPTG
QPRPSHHGVFAFLVTPSPYELCAVPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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| Tag: | C-Myc/DDK |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method |
| Labeling Method: | Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine |
| Buffer: | 25 mM Tris-HCl, 100 mM glycine, pH 7.3 |
| Storage: | Store at -80°C. Avoid repeated freeze-thaw cycles. |
| Stability: | Stable for 3 months from receipt of products under proper storage and handling conditions. |
| RefSeq: | <u>NP_001020332</u> |
| RefSeq Size: | 1520 |
| RefSeq ORF: | 1338 |



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| Synonyms: | CPD6; CYP2D; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; CYP2DL1; CYP11D6; P450-DB1; P450C2D; P450DB1 |
| Locus ID: | 1565 |
| UniProt ID: | P10635 , Q5Y7H2 |
| Cytogenetics: | 22q13.2 |
| Summary: | <p>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. [provided by RefSeq, Jul 2014]</p> |
| Protein Families: | Druggable Genome, P450, Transmembrane |
| Protein Pathways: | Drug metabolism - cytochrome P450 |