

## Product datasheet for **TR313592**

### Cytochrome P450 2D6 (CYP2D6) Human shRNA Plasmid Kit (Locus ID 1565)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Cytochrome P450 2D6 (CYP2D6) Human shRNA Plasmid Kit (Locus ID 1565)
Locus ID:	1565
Synonyms:	CPD6; CYP2D; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; CYP2DL1; CYP1ID6; P450-DB1; P450C2D; P450DB1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CYP2D6 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1565). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_000106</a> , <a href="#">NM_001025161</a> , <a href="#">NM_001025161.1</a> , <a href="#">NM_001025161.2</a> , <a href="#">NM_000106.1</a> , <a href="#">NM_000106.2</a> , <a href="#">NM_000106.3</a> , <a href="#">NM_000106.4</a> , <a href="#">NM_000106.5</a> , <a href="#">BC106757</a> , <a href="#">BC066877</a> , <a href="#">BC067432</a> , <a href="#">BC075023</a> , <a href="#">BC075024</a> , <a href="#">BC106758</a> , <a href="#">BC126858</a> , <a href="#">NM_001025161.3</a> , <a href="#">NM_000106.6</a>
UniProt ID:	<a href="#">P10635</a>
Summary:	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]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).