

## Product datasheet for **TG313599**

### Cytochrome P450 2A6 (CYP2A6) Human shRNA Plasmid Kit (Locus ID 1548)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Cytochrome P450 2A6 (CYP2A6) Human shRNA Plasmid Kit (Locus ID 1548)
Locus ID:	1548
Synonyms:	CPA6; CYP2A; CYP2A3; CYP11A6; P450C2A; P450PB
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CYP2A6 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 1548). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<a href="#">NM_000762</a> , <a href="#">NM_000762.1</a> , <a href="#">NM_000762.2</a> , <a href="#">NM_000762.3</a> , <a href="#">NM_000762.4</a> , <a href="#">NM_000762.5</a> , <a href="#">BC096253</a> , <a href="#">BC096254</a> , <a href="#">BC096255</a> , <a href="#">BC096256</a> , <a href="#">NM_000762.6</a>
UniProt ID:	<a href="#">P11509</a>
Summary:	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. [provided by RefSeq, Jul 2008]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**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).