

## Product datasheet for **TL713111**

### Cyp4x1 Rat shRNA Plasmid (Locus ID 246767)

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | shRNA Plasmids   |
| Product Name:             | Cyp4x1 Rat shRNA Plasmid (Locus ID 246767)   |
| Locus ID:                 | 246767   |
| Vector:                   | pGFP-C-shLenti (TR30023)   |
| E. coli Selection:        | Chloramphenicol (34 ug/ml)   |
| Mammalian Cell Selection: | Puromycin  |
| Format:                   | Lentiviral plasmids  |
| Components:               | Cyp4x1 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 246767).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.   |
| RefSeq:                   | <a href="#">NM_145675</a> , <a href="#">NM_145675.1</a>  |
| UniProt ID:               | <a href="#">Q8K4D6</a>   |
| Summary:                  | A cytochrome P450 monooxygenase that selectively catalyzes the epoxidation of the last double bond of the arachidonoyl moiety of anandamide, potentially modulating endocannabinoid signaling. Has no hydroxylase activity toward various fatty acids, steroids and prostaglandins. Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase).<br>[UniProtKB/Swiss-Prot Function] |
| 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).