

## **Product datasheet for TL505645**

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## Cyp4v3 Mouse shRNA Plasmid (Locus ID 102294)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Cyp4v3 Mouse shRNA Plasmid (Locus ID 102294)

**Locus ID:** 102294

**Synonyms:** AU043077; AW111961; Cyp4v2

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Cyp4v3 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 102294).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 133969, NM 133969.1, NM 133969.2, BC138967, BC026957, BC138968, NM 133969.3

UniProt ID: Q9DBW0

**Summary:** Omega-hydroxylase that oxidizes medium-chain saturated fatty acids and polyunsaturated

omega-3 fatty acids, and which plays a role in fatty acid and steroid metabolism in the eye. Catalyzes the omega-hydroxylation of medium-chain saturated fatty acids such as laurate, myristate and palmitate in an NADPH-dependent pathway. The substrate specificity is higher for myristate > laurate > palmitate (C14>C16>C12). Acts as a polyunsaturated omega-3 fatty

acids hydroxylase by mediating oxidation of docosahexaenoate (DHA) to 22-

hydroxydocosahexaenoate. Also produces some 21-hydroxydocosahexaenoate. Also converts eicosapentaenoate (EPA) to 20-hydroxyeicosapentaenoate (20-OH-EPA).[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



## 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).