

## Product datasheet for **TL501006**

### Hsd3b1 Mouse shRNA Plasmid (Locus ID 15492)

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | shRNA Plasmids  |
| Product Name:             | Hsd3b1 Mouse shRNA Plasmid (Locus ID 15492)   |
| Locus ID:                 | 15492   |
| Synonyms:                 | 3-beta-HSD I; D3Ertd383e  |
| Vector:                   | pGFP-C-shLenti (TR30023)  |
| E. coli Selection:        | Chloramphenicol (34 ug/ml)  |
| Mammalian Cell Selection: | Puromycin   |
| Format:                   | Lentiviral plasmids   |
| Components:               | Hsd3b1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 15492).<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="#">BC052659</a> , <a href="#">NM_001304800</a> , <a href="#">NM_008293</a> , <a href="#">NM_008293.1</a> , <a href="#">NM_008293.2</a> , <a href="#">NM_008293.3</a> ,<br><a href="#">NM_008293.4</a>  |
| UniProt ID:               | <a href="#">P24815</a>  |
| Summary:                  | A bifunctional enzyme responsible for the oxidation and isomerization of 3beta-hydroxy-Delta(5)-steroid precursors to 3-oxo-Delta(4)-steroids, an essential step in steroid hormone biosynthesis. Specifically catalyzes the conversion of pregnenolone to progesterone, 17alpha-hydroxypregnenolone to 17alpha-hydroxyprogesterone, dehydroepiandrosterone (DHEA) to 4-androstenedione, and androstenediol to testosterone. Additionally, catalyzes the interconversion between 3beta-hydroxy and 3-oxo-5alpha-androstane steroids controlling the bioavailability of the active forms. Specifically converts dihydrotestosterone to its inactive form 5alpha-androstanediol, that does not bind androgen receptor/AR. Also converts androstanedione, a precursor of testosterone and estrone, to epiandrosterone. Expected to use NAD(+) as preferred electron donor for the 3-beta-hydroxy-steroid dehydrogenase activity and NADPH for the 3-ketosteroid reductase activity.[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).