

Product datasheet for TR312326

OriGene Technologies, Inc.

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HSD17B1 Human shRNA Plasmid Kit (Locus ID 3292)

Product data:

Product Type: shRNA Plasmids

Product Name: HSD17B1 Human shRNA Plasmid Kit (Locus ID 3292)

Locus ID: 3292

Synonyms: 17-beta-HSD; 20-alpha-HSD; E2DH; EDH17B2; EDHB17; HSD17; SDR28C1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: HSD17B1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

3292). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>NM 000413, NM 001330219, NR 144397, NM 000413.1, NM 000413.2, NM 000413.3,</u>

BC104752, BC104752.1, BC019592, BC033110, BC037415, BC111935, BM564741, BM678516,

NM 000413.4

UniProt ID: P14061

Summary: This gene encodes a member of the 17beta-hydroxysteroid dehydrogenase family of short-

chain dehydrogenases/reductases. It has a dual function in estrogen activation and androgen inactivation and plays a major role in establishing the estrogen E2 concentration gradient between serum and peripheral tissues. The encoded protein catalyzes the last step in estrogen activation, using NADPH to convert estrogens E1 and E2 and androgens like 4-androstenedione, to testosterone. It has an N-terminal short-chain dehydrogenase domain with a cofactor binding site, and a narrow, hydrophobic C-terminal domain with a steroid substrate binding site. This gene is expressed primarily in the placenta and ovarian granulosa

cells, and to a lesser extent, in the endometrium, adipose tissue, and prostate.

Polymorphisms in this gene have been linked to breast and prostate cancer. A pseudogene of this gene has been identified. Alternative splicing results in multiple transcript variants.

[provided by RefSeq, Sep 2016]





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