

Product datasheet for TR319550

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GNRH2 Human shRNA Plasmid Kit (Locus ID 2797)

Product data:

Product Type: shRNA Plasmids

Product Name: GNRH2 Human shRNA Plasmid Kit (Locus ID 2797)

Locus ID: 2797

Synonyms: GnRH-II; LH-RHII

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Selection:

Puromycin

Format:

Retroviral plasmids

Components: GNRH2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2797). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001310220, NM 001501, NM 178331, NM 178332, NM 178331.1, NM 178332.1,

NM 001501.1, BC069362, BC115399, BC115400, NM 178332.2, NM 178331.2, NM 001501.2

UniProt ID: <u>043555</u>

Summary: This gene is a member of the gonadotropin-releasing hormone (GnRH) gene family. Proteins

encoded by members of this gene family are proteolytically cleaved to form neuropeptides which, in part, regulate reproductive functions by stimulating the production and release of the gonadotropins follicle-stimulating hormone (FSH) and luteinizing hormone (LH). The human GNRH2 gene is predicted to encode a preproprotein from which a mature

neuropeptide of 10 amino acids is cleaved. However, while the human genome retains the

sequence for a functional GNRH2 decapeptide, translation of the human GNRH2 gene has not yet been demonstrated and the GNRH2 gene of chimpanzees, gorilla, and Sumatran orangutan have a premature stop at codon eight of the decapeptide sequence which

suggests GNRH2 was a pseudogene in the hominid lineage. The GNRH2 gene is also believed to be a pseudogene in many other mammalian species such as mouse and cow. The receptor for this gene (GNRHR2) is predicted to be a pseudogene in human as well as many other mammalian species. The closely related GNRH1 and GNRHR1 genes are functional in human and other mammals and are generally functional in vertebrates. [provided by RefSeq, Mar

2019]







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).