

Product datasheet for TR304352

OriGene Technologies, Inc.

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Growth Hormone (GH1) Human shRNA Plasmid Kit (Locus ID 2688)

Product data:

Product Type: shRNA Plasmids

Product Name: Growth Hormone (GH1) Human shRNA Plasmid Kit (Locus ID 2688)

Locus ID: 2688

Synonyms: GH; GH-N; GHB5; GHN; hGH-N; IGHD1A; IGHD1B; IGHD2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: GH1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2688). 5µg purified plasmid DNA per construct

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

RefSeq: NM 000515, NM 022559, NM 022560, NM 022561, NM 022562, NM 022559.2, NM 022559.3,

NM 000515.1, NM 000515.2, NM 000515.3, NM 000515.4, NM 022561.1, NM 022561.2, NM 022560.1, NM 022560.2, NM 022560.3, NM 022562.1, NM 022562.2, BC062475, BC062475.1, BC090045, BC075012, BC075013, NM 000515.5, NM 022559.4, NM 022560.4

UniProt ID: P01241

Summary: The protein encoded by this gene is a member of the somatotropin/prolactin family of

hormones which play an important role in growth control. The gene, along with four other related genes, is located at the growth hormone locus on chromosome 17 where they are interspersed in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. The five genes share a remarkably high degree of sequence identity. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. This particular family member is expressed in the pituitary but not in placental tissue as is the case for the other four genes in the growth hormone locus. Mutations in or deletions of the gene lead to

growth hormone deficiency and short stature. [provided by RefSeq, Jul 2008]

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>.





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