

Product datasheet for **SC305031**

Growth Hormone (GH1) (NM_022560) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Growth Hormone (GH1) (NM_022560) Human Untagged Clone
Tag:	Tag Free
Symbol:	GH1
Synonyms:	GH; GH-N; GHB5; GHN; hGH-N; IGHD1A; IGHD1B; IGHD2
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_022560, the custom clone sequence may differ by one or more nucleotides ATGGCTACAGGCTCCCGGACGTCCCTGCTCCTGGCTTTTGGCCTGCTCTGCCTGCCCTGG CTTCAAGAGGGCAGTGCCTTCCAACCATTCCCTTATCCAGGCTTTTGGACAACGCATG CTCCGCGCCCATCGTCTGCACCAGCTGGCCTTTGACACCTACCAGGAGTTAACCTAGAG CTGCTCCGCATCTCCCTGCTGCTCATCCAGTCGTGGCTGGAGCCCGTGCAAGTTCCCTCAGG AGTGTCTTCGCCAACAGCCTGGTGTACGGCGCCTCTGACAGCAACGTCTATGACCTCCTA AAGGACCTAGAGGAAGGCATCCAACGCTGATGGGGAGGCTGGAAGATGGCAGCCCCCGG ACTGGGCAGATCTTCAAGCAGACCTACAGCAAGTTCGACACAACTCACACAACGATGAC GCACTACTCAAGAACTACGGGCTGCTCTACTGCTTCAGGAAGGACATGGACAAGGTCGAG ACATTCCTGCGCATCGTGCAAGTCCCGCTCTGTGGAGGGCAGCTGTGGCTTCTAG
Restriction Sites:	Please inquire
ACCN:	NM_022560
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



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Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_022560.2](#), [NP_072054.1](#)

RefSeq Size: 702 bp

RefSeq ORF: 534 bp

Locus ID: 2688

UniProt ID: [P01241](#)

Cytogenetics: 17q23.3

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction

Gene 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]
Transcript Variant: This variant (3) lacks an in-frame exon in the central coding region, compared to variant 1. The encoded isoform (3) is shorter, compared to isoform 1.