

Product datasheet for **SC109272**

GH2 (NM_002059) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GH2 (NM_002059) Human Untagged Clone
Tag:	Tag Free
Symbol:	GH2
Synonyms:	GH-V; GHB2; GHL; GHV; hGH-V
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109272 sequence for NM_002059 edited (data generated by NextGen Sequencing)

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ATGGCTGCAGGCTCCCGACGTCCTGCTCCTGGCTTTTGGCCTGCTCTGCTGTCTCTGG  
CTTCAAGAGGGCAGTGCCTTCCCAACCATTCCCTTATCCAGGCTTTTGGACAACGCTATG  
CTCCGCGCCCGTCGCCTGTACCAGCTGGCATATGACACCTATCAGGAGTTTGAAGAAGCC  
TATATCCTGAAGGAGCAGAAGTATTCACTTCTGCAGAACCCCCAGACCTCCCTCTGCTTC  
TCAGAGTCTATTCCAACACCTTCCAACAGGGTAAAAACGCAGCAGAAATCTAACCTAGAG  
CTGCTCCGCATCTCCCTGCTGCTCATCCAGTCATGGCTGGAGCCCGTGCAGCTCCTCAGG  
AGCGTCTTCGCCAACAGCCTGGTGTATGGCGCCTCGGACAGCAACGTCTATCGCCACCTG  
AAGGACCTAGAGGAAGGCATCCAAACGCTGATGTGGAGGCTGGAAGATGGCAGCCCCGG  
ACTGGGCAGATCTCAATCAGTCCTACAGCAAGTTTGACACAAAATCGCACAAACGATGAC  
GCACTGCTCAAGAACTACGGGCTGCTCTACTGCTTCAGGAAGGACATGGACAAGGTCGAG  
ACATTCCTGCGCATCGTGCAGTCCGCTCTGTGGAGGGCAGCTGTGGCTTCTAG
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Clone variation with respect to NM_002059.3



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_002059 unedited NNNGGTTCAAATTTGTAACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCCCAAC TCCCCGAACCATCAGGTCCTGTGGACAGCTCACCTAGCGGCAATGGCTGCAGGCTCCCGG ACGTCCCTGCTCCTGGCTTTTGGCCTGCTCTGCCTGTCTGGCTTCAAGAGGGCAGTGCC TTCCCAACCATTCCCTTATCCAGGCTTTTGGACAACGCTATGCTCCGCGCCCGTCGCCTG TACCAGCTGGCATATGACACCTATCAGGAGTTTGAAGAAGCCTATATCCTGAAGGAGCAG AAGTATTTCATTCCTGCAGAACCCCGACAGACCTCCCTCTGCTTCTCAGAGTCTATTCCAACA CCTTCCAACAGGGTGAAAACGCAGCAGAAATCTAACCTAGAGCTGCTCCGCATCTCCCTG CTGCTCATCCAGTCATGGCTGGAGCCCGTGCAGCTCCTCAGGAGCGTCTTCGCCAACAGC CTGGTGTATGGCGCCTCGGACAGCAACGTCTATCGCCACCTGAAGGACCTAGAGGAAGGC ATCCAAACGCTGATGTGGAGGCTGGAAGATGGCAGCCCCGGACTGGGCAGATCTTCAAT CAGTCCTACAGCAAGTTTGACACAAAATCGCACAAACGATGACGCACTGCTCAAGAACTAC GGGCTGCTCTACTGCTTCAGGAAGGACATGGACAANGTCGAGACATTCTGCGCATCGTG CAGTGCCGCTCTGTGGAGGGCAGCTGTGGCTTCTAGCTGCCCGGGTGGCATCCCTGTGAC CCCTCCCAGTGCCTCTCCTGGTCGTGGAAGGTGCTACTCCAGTGCCACCAGCCTGTGC CTAATANAATTAAGTTGCATCANAAAAAAAAAAAACTCGACTCTAGATTGCGGCCGCNG TCATAGCTGTTC
Restriction Sites:	NotI-NotI
ACCN:	NM_002059
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).
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).
Reconstitution Method:	<ol style="list-style-type: none"> 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_002059.3 , NP_002050.1
RefSeq Size:	821 bp
RefSeq ORF:	654 bp
Locus ID:	2689
UniProt ID:	P01242
Cytogenetics:	17q23.3
Domains:	hormone
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. As in the case of its pituitary counterpart, growth hormone 1, the predominant isoform of this particular family member shows similar somatogenic activity, with reduced lactogenic activity. Mutations in this gene lead to placental growth hormone/lactogen deficiency. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) utilizes all five exons generating the predominant 22-kDa isoform (1).