

## Product datasheet for **RG220054**

### GHRHR (NM\_000823) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GHRHR (NM_000823) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GHRHR
Synonyms:	GHRFR; GRFR; IGHD1B; IGHD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220054 representing NM_000823. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACCGCCGGATGTGGGGGGCCACGCTTCTGCGTGTGAGCCGTTACCGACCGTATTGGGCCAC
ATGCACCCAGAATGTGACTTCATCACCCAGCTGAGAGAGGATGAGAGTGCCTGTCTACAAGCAGCAGAG
GAGATGCCAACACCACCCTGGGCTGCCCTGCGACCTGGGATGGGCTGCTGTGCTGGCCACGGCAGGC
TCTGGCGAGTGGGTACCCTCCCCTGCCGGATTTCTTCTCTCACTTCAGCTCAGAGTCAAGGGCTGTG
AAACGGGATTGTACTATCACTGGCTGGTCTGAGCCCTTCCACCTTACCCTGTGGCTGCCCTGTGCT
CTGGAGCTGCTGGCTGAGGAGGAATCTTACTTCTCCACAGTGAAGATTATCTACACCGTGGCCATAGC
ATCTCTATTGTAGCCCTTCTGTTGGCCATCACCATCCTGGTTGCTCTCAGGAGGCTCCACTGCCCCCGG
AACTACGTCCACACCCAGCTGTTCACTTTTATCCTCAAGGCGGGAGCTGTGTTCTGAAGGATGCT
GCCCTTTCCACAGCGACGACACTGACCACTTCCACTGTTCTATGCAAGGTCTCTGTGGCC
GCCTCCCATTTGCCACCATGACCAACTTCAGCTGGCTGTTGGCAGAAGCCGTCTACCTGAACTGCCTC
CTGGCCTCCACCTCCCCAGCTCAAGGAGAGCCTTCTGGTGGCTGGTTCGCTGGCTGGGGCTGCC
GTGCTCTTCACTGGCAGTGGGTGAGCTGCAAAGTGGCCTCGAGGACATCGCGTGTGGACCTGGAC
GACACCTCCCCCTACTGGTGGATCATCAAAGGGCCATTGTCTCTCGGTGGGGTGAACTTGGGCTT
TTTCTCAATATTATCCGCATCCTGGTGGGAACTGGAGCCAGCTCAGGGCAGCTCCATACCCAGTCT
CAGTATTGGCGTCTCTCAAGTCGACACTTTTCTGATCCCACTTTTGAATTCATACATCATCTTC
AACTTCTGCCAGACAATGCTGGCTGGCATCCGCCTCCCCCTGGAGCTGGGACTGGGTTCTTCCAG
GGCTTCATTGTTGCCATCCTCTACTGCTTCTCAACCAAGAGGTGAGGACTGAGATCTCACGGAAGTGG
CATGGCCATGACCCTGAGCTTCTGCCAGCTGGAGGACCCGTGCTAAGTGGACCACGCCTTCCCCTCG
GCGGCAAAGGTGCTGACATCTATGTGC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG220054  
 Blue=ORF Red=Cloning site Green=Tag(s)

MDRRMWGAHVFCVLSPLPTVLGHMPECDFITQLREDESACLQAAEMPNTTLGCPATWDGLLCWPTAG  
 SGEWVTLPCPDFFSHFSSSESGAVKRDCTITGWSEPPFPYPVACVPLELLAAEESYFSTVKIITYVGHS  
 ISIVALFVAITILVALRRLHCPRNYVHTQLFTTFILKAGAVFLKDAALFHSDTDHCSFSTVLCCKVSA  
 ASHFATMTNFSWLLAEAVYLNCLLASTSPSSRRAFWWLVLAWGLPVLFGTWVSKLAFEDIACWDL  
 DTSPLYWIIKGPVLSVGVNFGFLNIIRILVRKLEPAQGLHTQSQYWRLSKSTLFLIPLFGIHYIIF  
 NFLPDNAGLGIRLPLELGLGSFQGFIVAILYCFLNQEVRTIISRKWHGHDPPELLPAWRTRAKWTTSPRS  
 AAKVLTSMC  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000823

**ORF Size:** 1269 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:**

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\\_000823.4](#)

**RefSeq Size:** 1614 bp

**RefSeq ORF:** 1272 bp

**Locus ID:** 2692

**UniProt ID:** [Q02643](#)

**Cytogenetics:** 7p14.3

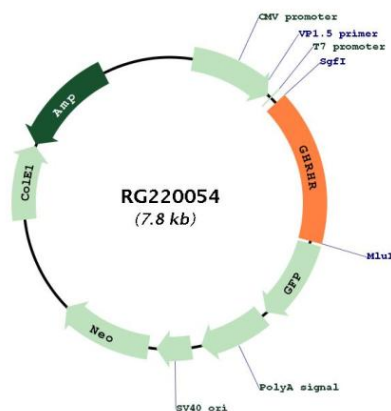
**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

**MW:** 47.4 kDa

**Gene Summary:** This gene encodes a receptor for growth hormone-releasing hormone. Binding of this hormone to the receptor leads to synthesis and release of growth hormone. Mutations in this gene have been associated with isolated growth hormone deficiency (IGHD), also known as Dwarfism of Sindh, a disorder characterized by short stature. [provided by RefSeq, Jun 2010]

**Product images:**



Circular map for RG220054

