

## Product datasheet for **RC223674**

### **GCHFR (NM\_005258) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** GCHFR (NM\_005258) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** GCHFR  
**Synonyms:** GFRP; HsT16933; P35  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC223674 representing NM\_005258  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

**ATGCCCTACCTGCTCATCAGCACCCAGATCCGCATGGAGGTGGGCCCACTATGGTGGGCGATGAACAGT**  
**CGGATCCAGAGCTGATGCAGCATCTGGGGCTTCAAAGAGAAGAGCCTTGGGAAACAACCTTTATGAATA**  
**CTACGTCGATGACCCCTCCCGCATAGTCTGGACAAGCTGGAACGCAGGGCTTCCGTGTGCTGAGCATG**  
**ACGGGGTGGCCAGACGCTGGTGTGTCTGCACAAGGAG**

**AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC**  
**TGGATTACAAGGATGACGACGATAAGGTTAA**

**Protein Sequence:** >RC223674 representing NM\_005258  
**Red**=Cloning site **Green**=Tags(s)  
  
MPYLLISTQIRMEVGPTMVGDEQSDPELMQHLGASKRRALGNNFYEYYVDDPPRIVLDKLERGRFRVLSM  
TGVGQTLVWCLHKE

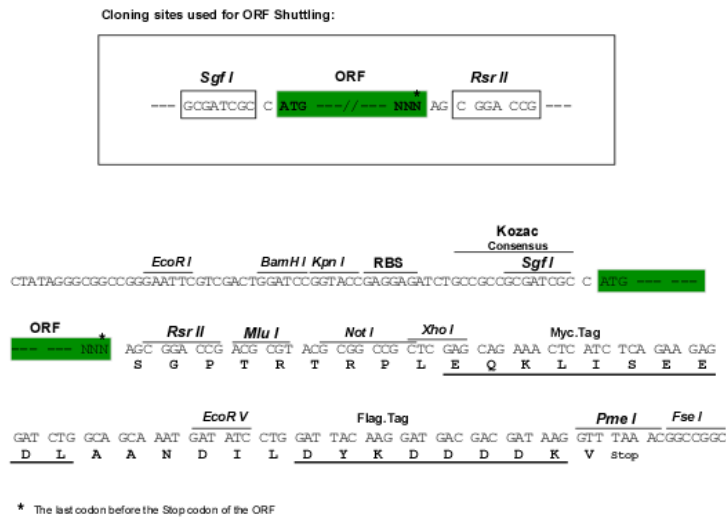
**SGP**TRRRLEQKLI**SEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8116\\_g07.zip](https://cdn.origene.com/chromatograms/mk8116_g07.zip)

**Restriction Sites:** SgfI-RsrII



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_005258

**ORF Size:** 252 bp

**OTI Disclaimer:** 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\\_005258.3](#)

**RefSeq Size:** 713 bp

**RefSeq ORF:** 255 bp

**Locus ID:** 2644

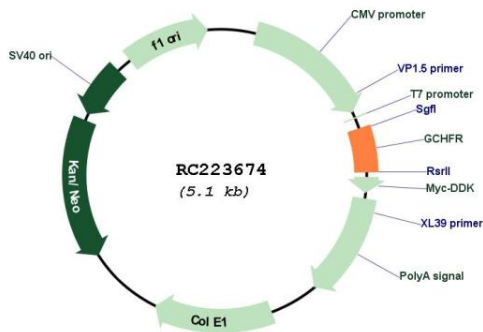
UniProt ID: [P30047](#)

Cytogenetics: 15q15.1

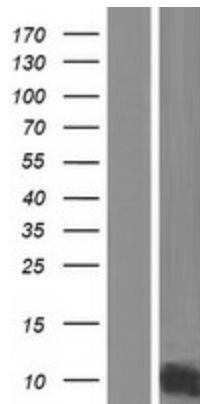
MW: 9.5 kDa

**Gene Summary:** GTP cyclohydrolase I feedback regulatory protein binds to and mediates tetrahydrobiopterin inhibition of GTP cyclohydrolase I. The regulatory protein, GCHFR, consists of a homodimer. It is postulated that GCHFR may play a role in regulating phenylalanine metabolism in the liver and in the production of biogenic amine neurotransmitters and nitric oxide. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC223674



Western blot validation of overexpression lysate (Cat# [LY417419]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223674 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).