

## Product datasheet for **RC215593**

### **HGF (NM\_000601) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	HGF (NM_000601) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HGF
Synonyms:	DFNB39; F-TCF; HGFB; HPTA; SF
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>RC215593 representing NM\_000601  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTGGGTGACCAAACCTCTGCCAGCCCTGCTGCTGCAGCATGTCCTCCTGCATCTCCTCCTGCTCCCCA  
TCGCCATCCCCTATGCAGAGGGACAAAGGAAAAGAAGAAATACAATTCATGAATTCAAAAATCAGCAAA  
GACTACCCTAATCAAAATAGATCCAGCACTGAAGATAAAAAACAAAAAGTGAATACTGCAGACCAATGT  
GCTAATAGATGTACTAGGAATAAAGGACTTCCATTCACTTGCAAGGCTTTTGTGTTTTGATAAAGCAAGAA  
AACAAATGCCTCTGGTTCCCCTTCAATAGCATGTCAAGTGGAGTGAAAAAGAATTTGGCCATGAATTTGA  
CCTCTATGAAAACAAAGACTACATTAGAACTGCATCATTGGTAAAGGACGCAGCTACAAGGGAACAGTA  
TCTATCACTAAGAGTGGCATCAAATGTCAGCCCTGGAGTCCATGATACACACGAACACAGCTTTTTGC  
CTTCGAGCTATCGGGTAAAGACCTACAGGAACTACTGTCGAAATCCTCGAGGGGAAGAAGGGGGACC  
CTGGTGTTCACAAGCAATCCAGAGGTACGCTACGAAGTCTGTGACATTCCTCAGTGTTCCAGAAGTTGAA  
TGATGACCTGCAATGGGGAGAGTTATCGAGGTCTCATGGATCATACAGAATCAGGCAAGATTTGTGAGC  
GCTGGGATCATCAGACCCACACCGGCACAAATCTTGCCTGAAAGATATCCCGACAAGGCTTTGATGA  
TAATTATTGCCGAATCCCGATGGCCAGCCGAGGCCATGGTGCTATACTCTTGACCCTCACACCCGCTGG  
GAGTACTGTGCAATTAACATGCGCTGACAATACTATGAATGACACTGATGTTCTTTGGAAAACAACTG  
AATGCATCCAAGTCAAGGAGAAGGCTACAGGGGCACTGTCAATACCATTTGGAATGGAATTCATGTCA  
GCGTTGGGATTCTCAGTATCCTCAGGAGCATGACATGACTCCTGAAAATTTCAAGTGAAGGACCTACGA  
GAAAATTAAGTCCGAAATCCAGATGGGTCTGAATCACCCTGGTGTGTTTACCCTGATCCAACATCCGAG  
TTGGCTACTGCTCCAAATTCAACTGTGATATGTCACATGGACAAGATTGTTATCGTGGGAATGGCAA  
AAATTATATGGCAACTTATCCCAACAAGATCTGGACTAACATGTTCAATGTGGGACAAGAACATGGAA  
GACTTACATCGTCATATCTTCTGGGAACAGATGCAAGTAAGCTGAATGAGAATTAAGTCCGAAATCCAG  
ATGATGATGCTCATGGACCCTGGTGCTACACGGGAAATCCACTCATTCTTGGGATTATTGCCCTATTTT  
TCGTTGTGAAGGTGATACCACACCTACAATAGTCAATTTAGACCATCCCGTAATATCTTGTGCCAAAACG  
AAACAATTGCGAGTTGTAATGGGATTCACACGAACAACATAGGATGGATGGTTAGTTTGGATACA  
GAAATAAACATATCTGCGGAGGATCATTGATAAAGGAGAGTTGGGTTCTTACTGCACGACAGTGTTCCT  
TTCTCGAGACTTGAAAGATTATGAAGCTTGGCTTGGAAATTCATGATGTCCACGGAAGAGGAGATGAGAA  
TGCAAACAGGTTCTCAATGTTTCCAGCTGGTATATGGCCCTGAAGGATCAGATCTGGTTTTAATGAAGC  
TTGCCAGGCTGCTGTCCTGGATGATTTTGTAGTACGATTGATTACCTAATTATGGATGCACAATTCC  
TGAAAAGACCAGTTGCAGTGTGTTATGGCTGGGGCTACACTGGATTGATCAACTATGATGGCCTATTACGA  
GTGGCACATCTCTATATAATGGGAAATGAGAAATGCAGCCAGCATCATCGAGGGAAGGTGACTCTGAATG  
AGTCTGAAATATGTGCTGGGGCTGAAAAGATTGGATCAGGACCATGTGAGGGGGATTATGGTGGCCCACT  
TGTTTGTGAGCAACATAAAATGAGAAATGGTCTTGGTGTGATTGTTCTGGTCTGGATGTGCCATTCCA  
AATCGTCTGGTATTTTGTCCGAGTAGCATATTATGCAAATGGATACACAAAATATTTTAAACATATA  
AGGTACCACAGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC215593 representing NM\_000601  
 Red=Cloning site Green=Tags(s)

MWVTKLLPALLLQHVLLHLLLLPIAIPYAEGQRKRNTIHEFKKSAKTTLIKIDPALKIKTKKVNTADQC  
 ANRCTRNKGLPFTCKAFVFDKARKQCLWFPFNMSGGVKEFGHEFDLYENKDYIRNCIIGKGRSYKGTV  
 SITKSGIKCQPWSSMIPHEHSFLPSSYRQKDLQENYCRNPRGEEGGPWCFSTSNPEVRYEVDIPQCSEVE  
 CMTCNGESYRGLMDHTESGKICQRWDHQTPHRHKFLPERYPDKGFDDNYCRNPDGQPRPWCYTLDPHTRW  
 EYCAIKTCADNTMNDTDVPLETTECIQGGEGYRGTVNTIWNIGIPCQRWDSQYPHEHDMTPENFKCKDLR  
 ENYCRNPDGSESPWCFTTDPNIRVGYSQIPNCDMSHGQDCYRGNKNGNYMGNLSQTRSGLTCSMWDKNME  
 DLHRHIFWEPDASKLNENYCRNPDDAHPWCYTGNPLIPWDYCPISRCEGDTTPTIVNLDHPVISC AKT  
 KQLRVVNGIPTRTNIGWMVSLRYRNKHCIGGSLIKESWLTARQCFFSRDLKDYEAWLGIHDVHGRGDEK  
 CKQVLNVSQLVYGPESDLVLMKLARPAVLDDFVSTIDL PNYGCTIPEKTS CSVYGWGTYGLIN YDGLLR  
 VAHLYIMGNEKCSQHRGKVTLNESEICAGAEKIGSGPCEGDYGGPLVCEQHMRMVLGVI VPGRGAIP  
 NRP GIFVRVAYYAKWIHKIILTYKVPQS

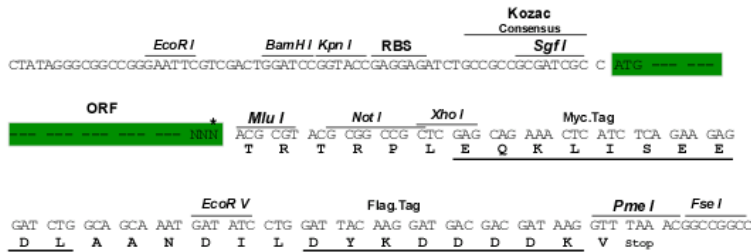
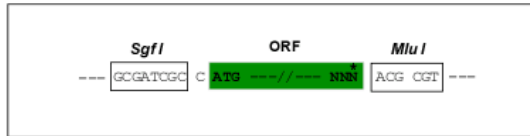
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6163\\_e01.zip](https://cdn.origene.com/chromatograms/mk6163_e01.zip)

**Restriction Sites:** Sgfl-MluI

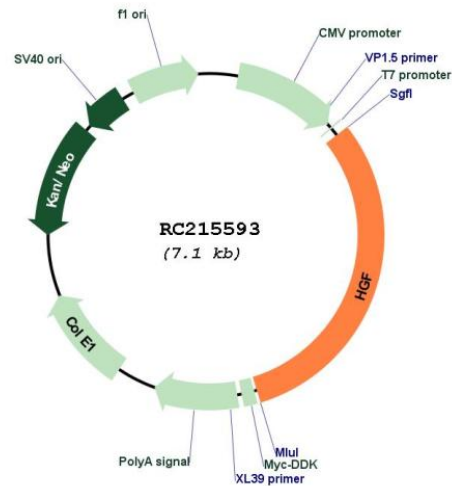
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_000601

ORF Size: 2184 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.

RefSeq: [NM\\_000601.6](#)

RefSeq Size: 2820 bp

RefSeq ORF: 2187 bp

Locus ID: 3082

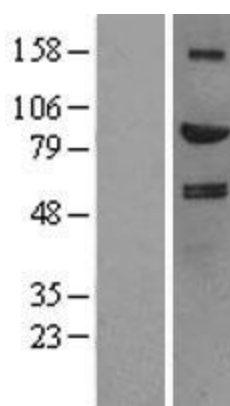
**Protein Families:** Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Protease, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction, Focal adhesion, Melanoma, Pathways in cancer, Renal cell carcinoma

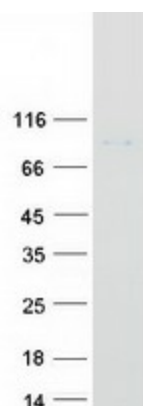
MW: 83.13 kDa

**Gene Summary:** This gene encodes a protein that binds to the hepatocyte growth factor receptor to regulate cell growth, cell motility and morphogenesis in numerous cell and tissue types. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate alpha and beta chains, which form the mature heterodimer. This protein is secreted by mesenchymal cells and acts as a multi-functional cytokine on cells of mainly epithelial origin. This protein also plays a role in angiogenesis, tumorogenesis, and tissue regeneration. Although the encoded protein is a member of the peptidase S1 family of serine proteases, it lacks peptidase activity. Mutations in this gene are associated with nonsyndromic hearing loss. [provided by RefSeq, Nov 2015]

### Product images:



Western blot validation of overexpression lysate (Cat# [LY400200]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215593 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HGF protein (Cat# [TP315593]). The protein was produced from HEK293T cells transfected with HGF cDNA clone (Cat# RC215593) using MegaTran 2.0 (Cat# [TT210002]).