

## Product datasheet for **RG207688**

### HB EGF (HBEGF) (NM\_001945) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HB EGF (HBEGF) (NM\_001945) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** HB EGF  
**Synonyms:** DTR; DTS; DTSF; HEGFL  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG207688 representing NM\_001945  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAGCTGCTGCCGTCCGTGGTGTCTGAAGCTCTTTCTGGCTGCAGTTCTCTCGGCACTGGTGACTGGCG  
 AGAGCCTGGAGCGGCTTCGGAGAGGGCTAGCTGCTGGAACCAGCAACCCGGACCCCTCCACTGTATCCAC  
 GGACCAGTCTACCCCTAGGAGCGGCCGGGACCGGAAAGTCCGTGACTTGCAAGAGGCAGATCTGGAC  
 CTTTTGAGAGTCACTTTATCCTCAAGCCACAAGCACTGGCCACACCAACAAGGAGGAGCACGGGAAAA  
 GAAAGAAGAAAGCAAGGGGCTAGGGAAGAAGAGGGACCCATGTCTTCGAAATACAAGGACTTCTGCAT  
 CCATGGAGAATGCAAAATATGTGAAGGAGCTCCGGGCTCCCTCCTGCATCTGCCACCCGGTTACCATGGA  
 GAGAGGTGTCATGGGCTGAGCCTCCAGTGAAAAATCGCTTATATACCTATGACCACACAACCATCCTGG  
 CCGTGGTGGCTGTGGTGTCTGTCTGTCTGCTGGTTCATCGTGGGCTTCTCATGTTTAGGTACCA  
 TAGGAGAGGAGTTATGATGTGAAAAATGAAGAGAAAGTGAAGTTGGGCATGACTAATCCAC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

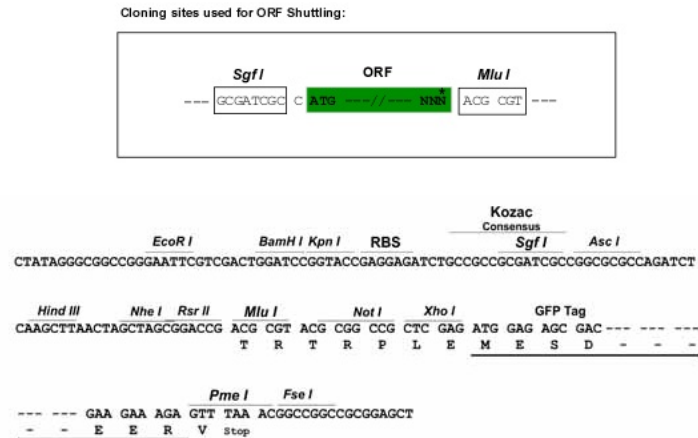
**Protein Sequence:** >RG207688 representing NM\_001945  
 Red=Cloning site Green=Tags(s)

MKLLPSVVLKFLAAVLSALVTGESLERLRRGLAAGTSNPDPTVSTDQLLPLGGGRDRKVRDLQEADLD  
 LLRVTLSSKPQALATPNKEEHGKRKKKGLGKKRDPCLRKYKDFCIHGECKYVKELRAPSCICHPGYHG  
 ERCHGLSLPVENRLYTYDHTTILAVVAVVLSVCLLVIVGLLMFRYHRRGGYDVENEKVKLGMTNSH

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**


- ACCN:** NM\_001945
- ORF Size:** 624 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\\_001945.3](#)
- RefSeq Size:** 2360 bp
- RefSeq ORF:** 627 bp
- Locus ID:** 1839
- UniProt ID:** [Q99075](#)
- Cytogenetics:** 5q31.3

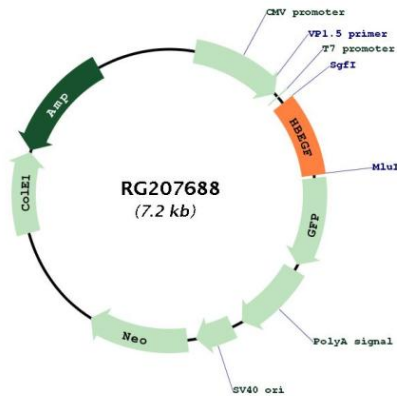
**Domains:** EGF

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

**Protein Pathways:** Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, GnRH signaling pathway

**Gene Summary:** Growth factor that mediates its effects via EGFR, ERBB2 and ERBB4. Required for normal cardiac valve formation and normal heart function. Promotes smooth muscle cell proliferation. May be involved in macrophage-mediated cellular proliferation. It is mitogenic for fibroblasts, but not endothelial cells. It is able to bind EGF receptor/EGFR with higher affinity than EGF itself and is a far more potent mitogen for smooth muscle cells than EGF. Also acts as a diphtheria toxin receptor.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG207688