

## **Product datasheet for SC301541**

## HGF (NM\_001010934) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** HGF (NM\_001010934) Human Untagged Clone

Tag: Tag Free

Symbol: HGF

Synonyms: DFNB39; F-TCF; HGFB; HPTA; SF

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM\_001010934 edited

ATGTGGGTGACCAAACTCCTGCCAGCCCTGCTGCTGCAGCATGTCCTCCTGCATCTCCTC
CTGCTCCCCATCGCCATCCCCTATGCAGAGGGACAAAGGAAAAGAAAATACAATTCAT
GAATTCAAAAAAATCAGCAAAGACTACCCTAATCAAAATAGATCCAGCACTGAAGATAAAA
ACCAAAAAAGTGAATACTGCAGACCAATGTGCTAATAGATGTACTAGGAATAAAGGACTT
CCATTCACTTGCAAGGCTTTTGTTTTTGATAAAGCAAGAAAACAATGCCTCTGGTTCCCC
TTCAATAGCATGTCAAGTGGAGTGAAAAAAGAATTTGGCCATGAATTTGACCTCTATGAA
AACAAAGACTACATTAGAAACTGCATCATTGGTAAAGGACGCAGCTACAAGGGAACAGTA
TCTATCACTAAGAGTGGCATCAAATGTCAGCCCTGGAGTTCCATGATACCACACGAAACC
AGCTTTTTGCCTTCGAGCTATCGGGGTAAAGACCTACAGGAAAACTACTGTCGAAATCCT
CGAGGGGAAGAAGAGAGGGGGACCCTGGTGTTTCACAAGCAATCCAGAGGTACGCTACGAAGTC

TGTGACATTCCTCAGTGTTCAGAAGGTAAATAA

**Restriction Sites:** Please inquire ACCN: NM\_001010934

**Insert Size:** 2000 bp

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**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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <u>More info</u>

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001010934.1</u>, <u>NP 001010934.1</u>

 RefSeq Size:
 2079 bp

 RefSeq ORF:
 633 bp

 Locus ID:
 3082

 UniProt ID:
 P14210

 Cytogenetics:
 7q21.11

**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





## **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] Transcript Variant: This variant (5) lacks multiple 3' exons but has an alternate 3' segment, compared to variant 1. The resulting protein (isoform 5) has a distinct and shorter C-terminus, compared to isoform 1.