

Product datasheet for **RG213540**

SCF (KITLG) (NM_003994) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCF (KITLG) (NM_003994) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SCF
Synonyms:	DCUA; DFNA69; FPH2; FPHH; Kitl; KL-1; MGF; SCF; SF; SHEP7; SLF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213540 representing NM_003994 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGAAGACACAAACTGGATTCTCACTTGCATTTATCTTCAGCTGCTCCTATTTAATCCTCTCGTCA
AAACTGAAGGGATCTGCAGGAATCGTGTGACTAATAATGTAAAAGACGTCACTAAATTGGTGCAAATCT
TCCAAAAGACTACATGATAACCCCTCAAATATGTCCCCGGGATGGATGTTTTGCCAAGTCATTGTTGGATA
AGCGAGATGGTAGTACAATTGTGACAGCTTGACTGATCTTCTGGACAAGTTTTCAAATATTTCTGAAG
GCTTGAGTAATTATCCATCATAGACAACTTGTGAATATAGTGGATGACCTTGTGGAGTGCCTGAAAGA
AAACTCATCTAAGGATCTAAAAAATCATTCAAGAGCCAGAACCCAGGCTCTTTACTCCTGAAGAATTC
TTTAGAATTTTTAATAGATCCATTGATGCCTTCAAGGACTTTGTAGTGGCATCTGAAACTAGTGATTGTG
TGGTTTCTTCAACATTAAGTCTGAGAAAGGGAAGGCCAAAAATCCCCCTGGAGACTCCAGCCTACACTG
GGCAGCCATGGCATTGCCAGCATTGTTTCTCTTATAATTGGCTTTGCTTTTGGAGCCTTACTGGAAG
AAGAGACAGCCAAGTCTTACAAGGCAGTTGAAAATATACAAATTAATGAAGAGGATAATGAGATAAGTA
TGTTGCAAGAGAAAGAGAGAGAGTTTCAAGAAGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG213540 representing NM_003994
Red=Cloning site Green=Tags(s)

MKKTQTWILTCIYLQLLLFNPLVKTEGICRNRVTNNVKDVTKLVANLPKDYMITLKYYVPGMDVLPShcwi
SEMvvQLSDSLTDLLDKFSNISEGLSNYSIIDKLvNIvDDLVECVKENSskDLKkSFKSPEPRLFTPEEF
FRIFNRSIDAFKDFVVASETSDCVVSSTLSPKGGKAKNPPGDSSLHWAAMALPALFSLIIGFAFGALYWK
KRQPSLTRAveniQINEEDNEISMLQEKEREFQEV

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja2659_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003994

ORF Size: 735 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_003994.5](#)

RefSeq Size: 5351 bp

RefSeq ORF: 738 bp

Locus ID: 4254

UniProt ID: [P21583](#)

Cytogenetics: 12q21.32

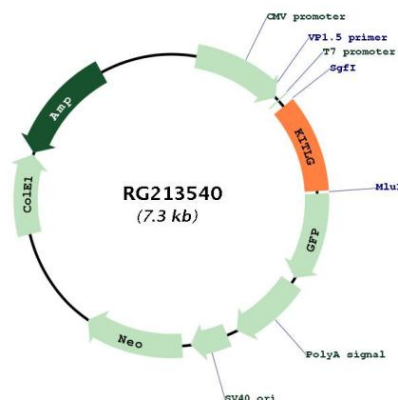
Domains: SCF

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Melanogenesis, Pathways in cancer

Gene Summary: This gene encodes the ligand of the tyrosine-kinase receptor encoded by the KIT locus. This ligand is a pleiotropic factor that acts in utero in germ cell and neural cell development, and hematopoiesis, all believed to reflect a role in cell migration. In adults, it functions pleiotropically, while mostly noted for its continued requirement in hematopoiesis. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213540