

Product datasheet for SC312617

SCF (KITLG) (NM_003994) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SCF (KITLG) (NM_003994) Human Untagged Clone
Tag:	Tag Free
Symbol:	SCF
Synonyms:	DCUA; DFNA69; FPH2; FPHH; Kitl; KL-1; MGF; SCF; SF; SHEP7; SLF
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_003994 edited
 GAACAGCTAAACGGAGTCGCCACACCCTGTTTGTGCTGGATCGCAGCGCTGCCCTTCCT
 TATGAAGAAGACACAACTTGGATTCTCACTTGCATTTATCTTCAGCTGCTCCTATTTAA
 TCCTCTCGTCAAACTGAAGGGATCTGCAGGAATCGTGTGACTAATAATGTAAGAAAGCGT
 CACTAAATTGGTGGCAAATCTTCCAAAAGACTACATGATAAACCTCAAATATGTCCCCGG
 GATGGATGTTTTGCCAAGTCATTGTTGGATAAGCGAGATGGTAGTACAATTGTCAGACAG
 CTTGACTGATCTTCTGGACAAGTTTTCAAATATTTCTGAAGGCTTGAGTAATTATTCAT
 CATAGACAACTTGTGAATATAGTGGATGACCTTGTGGAGTGCCTGAAAGAAAATCATC
 TAAGGATCTAAAAAATCATTCAAGAGCCAGAACCCAGGCTCTTACTCCTGAAGAATT
 CTTTAGAATTTTTAATAGATCCATTGATGCCTTCAAGGACTTTGTAGTGGCATCTGAAAC
 TAGTGATTGTGTGTTTTCTCAACATTAAGTCCTGAGAAAAGGGAAGGCCAAAAATCCCC
 TGGAGACTCCAGCCTACACTGGGACCCATGGCATTGCCAGCATTGTTTTCTTTATAAT
 TGGCTTTGCTTTTGGAGCCTTATACTGGAAGAAGAGACAGCCAAGTCTTACAAGGGCAGT
 TGAAAATATACAAATTAATGAAGAGGATAATGAGATAAGTATGTTGCAAGAGAAAAGAGAG
 AGAGTTTCAAGAAGTGTAATTGTGGCTTGATCAACACTGTTACTTTTCGTACATTGGCTG
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 ACTTGCATGGAGCAGGACTCTATTTAAGGACTGCGGGACTTGGGTCTCATTTAGAATT
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 CAGAAATGTCTAAATGCTGAAAAAACACCTAGCTTTATTCTTCAGATACAACTGCAGCC
 TGTAGTTATCCTGGTCTCTGCAAGTAGATTTTCACTTGGATAGTGAGGGTAACAATTTTT
 CTCAAAGGGATCTAGAAAAATGTTTTAAACTCAGTAGTGTGAGCCACTGTACAGTGTAG
 AAAGCAGTGGAACTGTGATTGGATTTGGCAACATGTCAGCTTTATAGTTGCCGATTAGT
 GATATGGGTCTGATTTTCGATCTTCTGATGTAACCATGCTCACCCATATCCCACTAT
 ACAAATGCAAATGGTTGCCTGGTCCATTTATGCAAGGGAGCCAGTACTGAATTATGCCT
 TGGCAGAGGGGAGACTCCAAAAGAGTCATCGCAGGAAGAAGTTAAGAACACTGAACATCA



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GAACAGTCTGCCAAGAAGGACATTGGCATCCTGGGAAAGTCCGCCTTTTCCCTTGACCAC
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TTACAGAGCTATGTAAAGGGACTTAGGAGAAAAATGCTGAATGTAAGATGGTCCCATTTC
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GAAACTTTAGTTATTTATAGTATAATCACCATTATCTGTTTAAAGGATCCATTTAGTTAA
AATCGGGCACTCTATATTCATTAAGGTTTATGAATTA AAAAGAAAGCTTTATGTAGTTAT
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CTTATGGTTTATTTGATGAAAGTTCTTTTAAACATGTCTTGAATGTACACATAAAGGAAT
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TAAGATGACAGTTTTCAATGTAGTGACACAAAAGGCATGAAAACTAACTGCTAGCTTT
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CAAATCCAGATGCAACTCCAGTAAGTGGCCTTTGCTCTTTTTTTGTACCAAAGAGCCAGA
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TTTAAAAAATATATTCTTCAAATGCATTTTGGCATGGTGGGATGGATGTTGCAAAAAGA
TATCCGGAGCCTCCAGTCTGTCACTAAGTATGTTAAATCACCTCTCTTCTTTGGGTC
TCAATTTTTTATTTATCTATATGGTAAACTCAGAGATCACTCCTTAGGGGTGAGTCTAT
TGCAATATGACCGACAAAAGACAAAATAGCATTGAAACTAACCATACAAAATATCCA
ACTCTGGATTCTGTGAATAAGTATCTTGACCATAAAAAGTCAATGCTGTTCTTGTGTTCTA
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CCATTTACACAAGAGATGGCTTTTTCTTTGCTTGAATAAACATTTTGGATCACCTCCAA
AGAATGAAAACCAAGTAGTACGTTTTAGTCATATTAGTCAGGATGAGAACTATAAGATGT
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AAGAGCAGAAAAATGTAATGCTCATGAAGTTTTGAATGCCAAAAGATATTTAGAAATC
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CATTGAGATTGAAATTTAATTAGCTCATTGTGGAGTTTGTATCACACAATTCATAATGT
TGCTGCTTTCCATTAAGTCTTGAATGCCTTTGTTTGTAAAAATAAATAATGGTAC
TTTCATTTTATAACAAGGTGTTTTTTTCAAGAAATAATCCATGCTAAAATGGATATTTGT

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GATCCTGAAATGTTTACTAAGCATTGTAATTTATTTATAACTGCCATCTCCAACACTACAT
CCTTATGATGTTTTTAACAATAAAATTAACAACACTGTTAACTAAAAACACACCGTTT
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CTATTCTATATTCTAAGGGTTAATATGTGATTATAGTGTCCACTTGCCACCATTTTTTTA
AATCAATGGACTGAAAAGTATTAATTTAGATGGATGCGCAGATATACCTCAGTTCAGT
CATAGATTGGAGTTTGCATATAATAATGTAATGTATGTCGACACTATTCTAAATAGTTC
TATTATGACTGAAATTTAATTAATAAAAAAGTTGTAATGTGATGTGTATGTGTATA
TACTGTATGTGTACTTTTTAAAATAGGTGTATGTCCCAACCTTTTTTATACAGGTTTGA
ATTTAAAATTACATGATATATACATATACTTTATTGTTCTAAATAAAGAATTTTATGCAC
TCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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Restriction Sites: Please inquire

ACCN: NM_003994

Insert Size: 5200 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 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: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_003994.4.

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_003994.4](#), [NP_003985.2](#)

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:	<p>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]</p> <p>Transcript Variant: This variant (a) lacks an alternate in-frame exon, compared to variant b. Isoform a lacks the primary proteolytic-cleavage site; as a result, the protein encoded by isoform a is largely a membrane bound product. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>