

## Product datasheet for **RC211693**

### **SDF1 (CXCL12) (NM\_000609) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SDF1 (CXCL12) (NM\_000609) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SDF1  
**Synonyms:** IRH; PBSF; SCYB12; SDF1; TLSF; TPAR1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC211693 representing NM\_000609  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAACGCCAAGGTCGTGGTCTGCTGGTCTCGTGCTGACCGCGCTCTGCCTCAGCGACGGGAAGCCCG  
TCAGCCTGAGCTACAGATGCCCATGCCGATTCTCGAAAGCCATGTTGCCAGAGCCAACGTC AAGCATCT  
CAAAATCTCAACTCCAACTGTGCCCTT CAGATTGTAGCCCGCTGAAGAACAACAAGACAAGTGC  
TGCATTGACCCGAAGCTAAAGTGGATTCAGGAGTACCTGGAGAAAGCTTTAAACAAGAGGTTCAAGATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC211693 representing NM\_000609  
Red=Cloning site Green=Tags(s)

MNAKVVVVLVLVLTALCLSDGKPVSLSYRCPFRFFESHVARANVKHLKILNTPNCALQIVARLKNNNRQV  
CIDPKLKIWEYLEKALNKRFKM

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

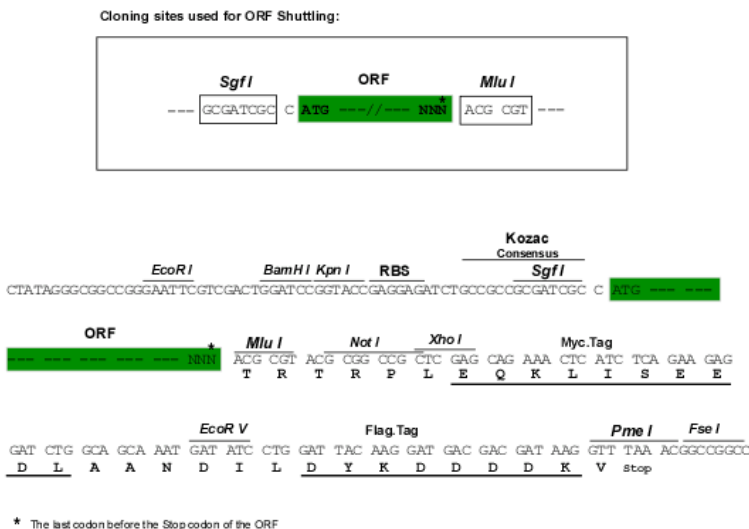
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6484\\_e04.zip](https://cdn.origene.com/chromatograms/mk6484_e04.zip)

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**



**ACCN:** NM\_000609

**ORF Size:** 279 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.

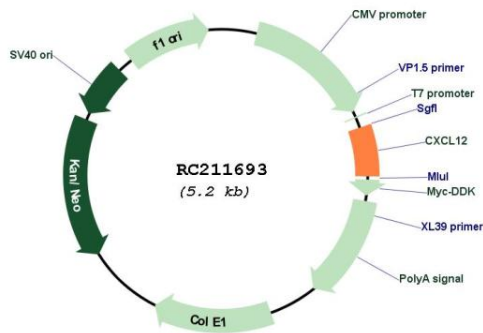
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_000609.7](#)

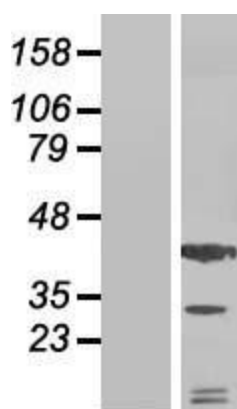
**RefSeq Size:** 3560 bp

RefSeq ORF:	282 bp
Locus ID:	6387
UniProt ID:	<a href="#">P48061</a>
Cytogenetics:	10q11.21
Domains:	IL8
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein
Protein Pathways:	Axon guidance, Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Leukocyte transendothelial migration
MW:	10.5 kDa
Gene Summary:	This antimicrobial gene encodes a stromal cell-derived alpha chemokine member of the intercrine family. The encoded protein functions as the ligand for the G-protein coupled receptor, chemokine (C-X-C motif) receptor 4, and plays a role in many diverse cellular functions, including embryogenesis, immune surveillance, inflammation response, tissue homeostasis, and tumor growth and metastasis. Mutations in this gene are associated with resistance to human immunodeficiency virus type 1 infections. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2014]

### Product images:



Circular map for RC211693



Western blot validation of overexpression lysate (Cat# [LY424610]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211693 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).