

Product datasheet for **RC207891**

SDF1 (CXCL12) (NM_199168) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SDF1 (CXCL12) (NM_199168) 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: >RC207891 representing NM_199168
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACGCCAAGGTCGTGGTCTGTGGTCTCGTGCTGACCGCGCTCTGCCTCAGCGACGGGAAGCCCG
TCAGCCTGAGCTACAGATGCCCATGCCGATTCTCGAAAGCCATGTTGCCAGAGCCAACGTCAAGCATCT
CAAAATCTCAACTCCAACTGTGCCCTTCAAGATTGTAGCCCGGCTGAAGAACAACAACAGACAAGTG
TGCATTGACCCGAAGCTAAAGTGGATTCAGGAGTACCTGGAGAAAGCTTTAAACAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207891 representing NM_199168
Red=Cloning site Green=Tags(s)
MNAKVVVVLVVLVLTALCLSDGKPVSLSYRCPCRFESHVARANVKHLKILNTPNCALQIVARLKNNNRQV
CIDPKLKIYEQYLEKALNK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:



ACCN: NM_199168

ORF Size: 267 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.

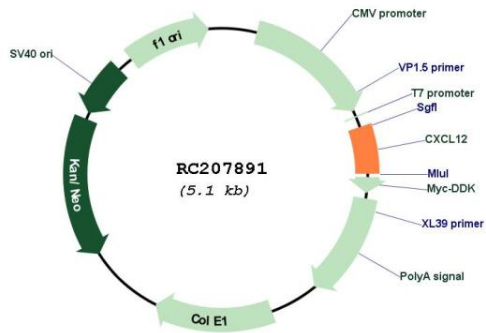
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

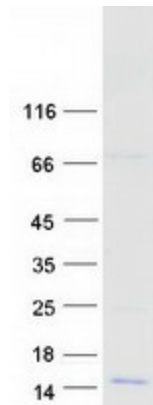
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_199168.4
RefSeq Size:	1937 bp
RefSeq ORF:	270 bp
Locus ID:	6387
UniProt ID:	P48061
Cytogenetics:	10q11.21
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:	9.9 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 RC207891



Coomassie blue staining of purified CXCL12 protein (Cat# [TP307891]). The protein was produced from HEK293T cells transfected with CXCL12 cDNA clone (Cat# RC207891) using MegaTran 2.0 (Cat# [TT210002]).