

## Product datasheet for **SC328213**

### **SDF1 (CXCL12) (NM\_001178134) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SDF1 (CXCL12) (NM_001178134) Human Untagged Clone
Tag:	Tag Free
Symbol:	SDF1
Synonyms:	IRH; PBSF; SCYB12; SDF1; TLSF; TPAR1
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001178134, the custom clone sequence may differ by one or more nucleotides

```
ATGAACGCCAAGGTCGTGGTCGTGCTGGTCCTCGTGCTGACCGCGCTCTGCCTCAGCGACGGGAAGCCCG
TCAGCCTGAGCTACAGATGCCCATGCCGATTCTTCGAAAGCCATGTTGCCAGAGCCAACGTCAAGCATCT
CAAAATTCTCAACACTCCAAACTGTGCCCTTCAGATTGTAGCCCGGCTGAAGAACAACAACAGACAAGTG
TGCATTGACCCGAAGCTAAAGTGGATTCAGGAGTACCTGGAGAAAGCTTTAAACAACCTGATCAGCGCCG
CACCAGCCGGGAAGAGGGTGATTGCTGGGGCTCGTGCCCTGCATCCCTCTCCTCCAGGGCCTGCCCCAC
AGCTCGGGCCCTCTGTGAGATCCGTCTTTGGCCTCCTCCAGAATGGAGCTGGCCCTCTCCTGGGGATGTG
TAA
```

Restriction Sites:	Please inquire
ACCN:	NM_001178134



[View online »](#)

**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](mailto: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 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:** [NM\\_001178134.1](#), [NP\\_001171605.1](#)

**RefSeq Size:** 1209 bp

**RefSeq ORF:** 423 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

**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] Transcript Variant: This variant (4) lacks an alternate segment, which results in a frameshift, compared to variant 1. The resulting protein (isoform delta) is longer and has a distinct C-terminus compared to isoform alpha.