



# Anti-Human SDF-1 alpha

20200805BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-P82</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Anti-human SDF-1 $\alpha$  is produced in rabbits using highly purified recombinant human SDF-1 $\alpha$  as the immunizing antigen. Anti-hSDF-1 $\alpha$  specific antibody was purified by affinity chromatography employing immobilized hSDF-1 $\alpha$  matrix.

## Target Background

<b>Synonyms (Target):</b>	CXCL12; IRH; PBSF; SDF1; TLSF; SDF1A; SDF1B; TPAR1; SCYB12
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Stromal cell-derived factor (SDF)-1 alpha and SDF-1 beta are the first cytokines initially identified using the signal sequence trap cloning strategy from a mouse bone-marrow stromal cell line. They are encoded by a single gene, PBSF, and arise by alternative splicing. The two proteins are identical except for the four amino acid residues that are present in the carboxy-terminus of SDF-1 beta and absent from SDF-1 alpha. SDF-1/PBSF is highly conserved between species. Human mature SDF-1 shares approximately 99% amino acid sequence identity with the mouse protein.

### Database References Target

<b>Protein RefSeq:</b>	NP_954637.1
<b>Uniprot ID:</b>	P48061
<b>mRNA RefSeq:</b>	NM_199168.3

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	Recombinant Human SDF-1-alpha
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Centrifuge vial prior to opening. Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for at least 5 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

**Neutralization:** To yield one-half maximal inhibition [ND<sub>50</sub>] of the biological activity of hSDF1 $\alpha$  (100 ng/ml), a concentration of 2-4 µg/ml of this antibody is required.

**Sandwich ELISA:** To detect hSDF-1 $\alpha$  by sandwich ELISA (using 100µl/well antibody solution) a concentration of 0.5-2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 2-4 ng/well of recombinant hSDF-1 $\alpha$ .

**Western Blot:** To detect hSDF-1 $\alpha$  by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hSDF-1 $\alpha$  is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**