



Anti-CXCL12 polyclonal antibody [Biotin] (DPABY-441)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	CXCL12/Stromal Cell-derived Factor 1 (SDF-1) is a member of the CXC chemokine ligand superfamily. Six alternatively spliced CXCL12/SDF-1 isoforms have been identified including, CXCL12/SDF-1 alpha, CXCL12/SDF-1 beta, and CXCL12/SDF-1 gamma. CXCL12/SDF-1 alpha is 89 amino acids (aa) in length with a predicted molecular weight of 10 kDa, CXCL12/SDF-1 beta is 93 aa in length with a predicted molecular weight of 10.6 kDa, and CXCL12/SDF-1 gamma is 119 aa in length with a predicted molecular weight of 13.7 kDa. The mouse CXCL12/SDF-1 orthologs share 99% aa sequence identity with the human protein. The alpha and beta isoforms are ubiquitously expressed while the gamma isoform is primarily expressed in the heart. CXCL12/SDF-1 isoforms are chemotactic for T lymphocytes and monocytes. It is cardio protective and has also been shown to hinder CXCR4-mediated HIV infection of T cells.
Specificity	Detects human CXCL12/SDF-1 beta in ELISAs and Western blots. In sandwich ELISAs, less than 0.2% cross-reactivity with recombinant (rh) SDF-1 alpha and recombinant mouse SDF-1 alpha is observed.
Immunogen	E. coli-derived recombinant human CXCL12/SDF-1 beta . Lys22-Met93 Accession Number P48061
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Antigen Affinity-purified
Conjugate	Biotin
Applications	Western Blot, ELISA Detection (Matched Pair)

Format	Liquid
Size	50 µg
Buffer	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

GENE INFORMATION

Gene Name	CXCL12 chemokine (C-X-C motif) ligand 12 [Homo sapiens (human)]
Official Symbol	CXCL12
Synonyms	CXCL12; chemokine (C-X-C motif) ligand 12; IRH; PBSF; SDF1; TLSF; TPAR1; SCYB12; stromal cell-derived factor 1; intercrine reduced in hepatomas; pre-B cell growth-stimulating factor;
Entrez Gene ID	6387
Protein Refseq	NP_000600
UniProt ID	P48061
Chromosome Location	10q11.1
Pathway	Axon guidance; CXCR4-mediated signaling events; Chemokine receptors bind chemokines; Chemokine signaling pathway; Class A/1 (Rhodopsin-like receptors); Cytokine-cytokine receptor interaction; G alpha (i) signalling events; GPCR downstream signaling;
Function	CXCR chemokine receptor binding; chemokine activity; chemokine receptor binding; growth factor activity; receptor binding;