

GFH20

Recombinant Human SDF-1 α / CXCL12a

Description

Stromal cell-derived factor-1 α (SDF-1 α), also known as CXCL12a, is one of two SDF-1 splice variants made by a wide variety of cells upon stimulation by inflammatory cytokines such as TNF, IL-1, and LPS. SDF-1 α signals through the G protein-coupled receptor CXCR4 to recruit activated leukocytes. Human and mouse SDF-1 α share 99% sequence identity.

Length	68 aa
Molecular Weight	8.0 kDa
Source	E. coli
Accession Number	P48061 (2)
Purity	\geq 95% determined by reducing and non-reducing SDS-PAGE

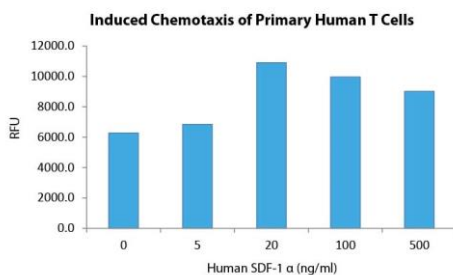
Specifications

Alternative Names	Monocyte Chemotactic Protein 1, CCL2, JE, MCAF
Biological Activity	Human SDF-1 α is fully biologically active when compared to standard. The activity is determined by the ability to induce chemotaxis of human primary T cells.
Endotoxin Level	\leq 1.00 EU/ μ g as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	KPVSLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNK

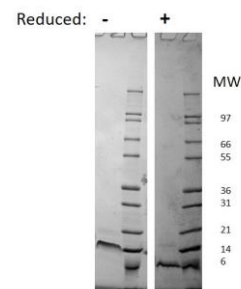
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced chemotaxis of human primary T cells assay for Human SDF-1 α . Cells that migrated were counted using a luminescent substrate. Migration over basal levels was reported in response to Human SDF-1 α starting at 20 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μ g of protein was loaded in each lane. Human SDF-1 α has a predicted Mw of 8.0 kDa.