

## Recombinant Human CXCL12/SDF-1 $\alpha$



**Description:** CXCL12 is a ligand for the G protein coupled receptor CXCR4, and induces chemotactic migration in a wide range of CXCR4-expressing cells. CXCL12 protein is expressed in *E. coli*, refolded and cleaved to yield the native, secreted form of the mature chemokine.

Amino Acid Sequence:	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNK
Molecular Weight:	7959.4 Daltons
Fusion Tag:	N/A
Special Characteristic(s):	N/A
Purity:	Purity assessed by HPLC, Mass Spectrometry, and NMR*
Source:	human protein expressed in <i>E. coli</i>
Physical Form:	Lyophilized
Solubility:	Freely Soluble in Water
Storage Conditions:	

Product Form	Temperature	Storage Time
Lyophilized	-20°C to -80°C	12 months
Lyophilized	4°C	6 months
Lyophilized	RT	1 month

\*\* Avoid repeated freeze-thaw cycles

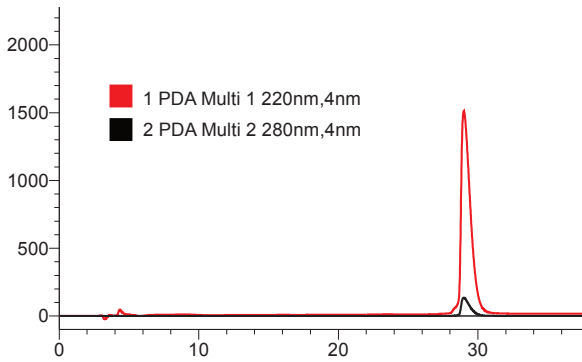
### Additional comments or descriptive information:

\* All recombinant proteins produced and sold by Protein Foundry, LLC are endotoxin-free <0.01 EU/ug of protein and validated using RP-HPLC, NMR, and functional reporter assay where available.

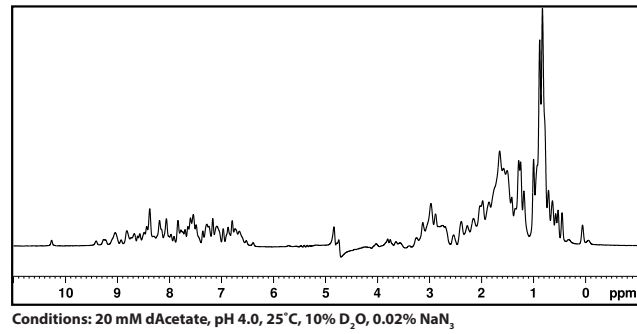
CXCR4 agonist activity verified by intracellular calcium flux using THP1 cells as described by Veldkamp et al, Science Signaling 2008.

## Protein Purity:

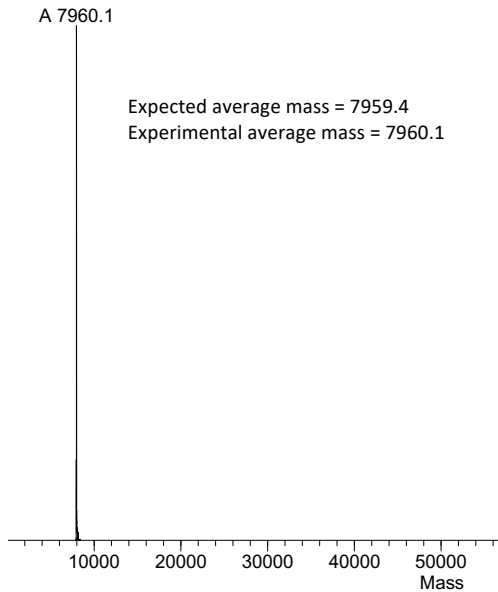
### Reverse Phase HPLC Trace



### 1D 1H NMR Spectrum



### Mass Spectrometry



### Functional assay

