

**Table 2.** Survey of three-dimensional structures of chemokines

	Chemokine	Code*	Exp.	Oligomerization	Mutation	Ref.
<b>CXC</b>						
CXCL1	MGSA- $\alpha$ (Gro $\alpha$ )	1MGS	NMR	$\beta$ -Sheet dimer	wt	1
		1MSG (1MSH)	NMR	$\beta$ -Sheet dimer	C-terminal (N73)	2
CXCL2	MIP-2 $\alpha$ (Gro $\beta$ /MGSA- $\alpha$ )	1QNK	NMR	$\beta$ -Sheet dimer	N-terminal trunc (1–4)	3
CXCL3	MIP-2 $\beta$ (Gro $\gamma$ )	1MI2	NMR	$\beta$ -Sheet dimer	Murine wt	4
CXCL4	PF4	1RHP	X-ray	Tetramer	wt	5
		1PFM (1PFN)	NMR	Tetramer	Chimeric <sup>†</sup>	6
		1NAP	X-ray	Tetramer	M26L	7
CXCL7	NAP-2	1TVX	X-ray	Tetramer	M26L + insert DSDLY	8
		n.a.	NMR	Monomer		9
CXCL8	IL-8 (NAP-1)	1IL8 (2IL8)	NMR	$\beta$ -Sheet dimer	wt	10
		3IL8	X-ray	$\beta$ -Sheet dimer	wt	11
		1IKL (1IKM)	NMR	Monomer	Del(1-3)+Met <sup>‡</sup>	12
		1ICW	X-ray	$\beta$ -Sheet dimer	E38C/C50A	13
		1ILQ (1ILP)	NMR	Dimer + receptor	wt	14
		1QE6	X-ray	$\beta$ -Sheet dimer	L5C/H33C	15
CXCL12	SDF-1 (PBSF)	1SDF (2SDF)	NMR	Monomer	wt	16
		1A15	X-ray	$\beta$ -Sheet dimer	N33A (synthetic)	17
		1QG7	X-ray	$\beta$ -Sheet dimer	wt	18
<b>CC</b>						
CCL1	I309	1EL0	NMR	Monomer	wt	19
CCL2	MCP-1	1DOM	NMR	N-terminal dimer	wt	20
		1DOK	X-ray	N-terminal dimer	Ins (Met0)	21
		1DOL	X-ray	N-terminal dimer	Ins (Met0)	21
CCL3	MIP-1 $\alpha$	1B53 (1B50)	NMR	N-terminal dimer	D26A	22
CCL4	MIP-1 $\beta$	1HUM	NMR	N-terminal dimer	wt	23
		1JE4	NMR	Monomer	F13A	24
CCL5	RANTES	1RTO (1RTN)	NMR	N-terminal dimer	wt	25
		1HRJ	NMR	N-terminal dimer	wt (acidic pH)	26
		1B3A	X-ray	N-terminal dimer	AOP-RANTES	27
		1EQT	X-ray	N-terminal dimer	MET-RANTES	28
CCL7	MCP-3	1BO0	NMR	Monomer	wt	29
		1NCV	NMR	$\beta$ -Sheet dimer	wt	30
CCL8	MCP-2	1ESR	X-ray	N-terminal dimer	wt	31
CCL11	Eotaxin-1	1EOT	NMR	Monomer	wt	32
CCL15	MIP-5 (HCC-	2HCC	NMR	Monomer	wt	33
CCL20	MIP-3 <sup>§</sup>	1HA6	NMR	Monomer	wt	34
CCL23	MPIF-1 (CK $\beta$ 8)	1G91	NMR	Monomer	wt	35
CCL24	Eotaxin-2 (MPIF-2/CK $\beta$ 6)	1EIG (1EIH)	NMR	Monomer	wt	36
CCL26	Eotaxin-3 (MIP-4 $\alpha$ )	1G2S (1G2T)	NMR	Monomer	wt	37
<b>CX<sub>3</sub>C</b>						
CX3CL1	Fraktaline	1B2T	NMR	Monomer	Chemokine domain	38
		1F2L	X-ray	N-terminal dimer	Chemokine domain	39

Description of available three-dimensional structures of heparin classified by using the new nomenclature (40). wt, wild type.

\*For some NMR structures, the codes without and with parenthesis refers to the minimized mean structure, and the different ensemble members, respectively.

<sup>†</sup>The first 10 N-terminal residues of recombinant PF4 were replaced by the N-terminal residues of IL-8 sequence.

<sup>‡</sup>The amide proton of Leu-25 was modified into *N*-methyl to produce a monomeric protein.

<sup>§</sup>Structure of the murine protein.

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