CCP modules of known structure[a] (23/10/2009)

CCP-containing protein	SwissProt Accession no.	PDB code(s)	Modules solved
Complement receptor 1 (CD35)	P17927	1GKN^{NMR}15,16; 1GKG^{NMR}16,17; 1PPQ^{NMR}16	15, 16, 17 (of 30)
Complement receptor 2 (CD21)	P20023	1GHQ^{XR}1,2[b]; 1LY2^{XR}1,2	1, 2 (of 15 or 16)
Decay accelerating factor (CD55)	P78361	1H03^{XR}3,4; 1H04^{XR}3,4; 1H2P^{XR}3,4; 1H2Q^{XR}3,4; 1UOT^{XR}3,4; 1OJV^{XR}1–4; 1OJW^{XR}1–4; 1OJY^{XR}1–4; 1OK1^{XR}1–4; 1OK2^{XR}1–4; 1OK3^{XR}1–4; 1OK9^{XR}1–4; 1NWV^{NMR}2,3	1, 2, 3, 4 (of 4)
Membrane cofactor protein (CD46)	P15529	1CKL^{XR}1,2; 2O39^{XR}1,2[c]	1, 2 (of 4)
Factor H	P08603	2RLP^{NMR}1,2; 2RLQ^{NMR}2,3; 2WII^{XR}1-4[r]; 2W80^{XR}6,7[s]; 2W81^{XR}6,7[s]; 2UWN^{XR}6-8(H402)[p]; 2V8E^{XR}6-8(H402)[p]; 2JGW^{NMR}7(H402); 2JGX^{NMR}7(Y402); 2KMS^{NMR}12,13; 1HFH^{NMR}15,16; 1HFI^{NMR}15; 1HCC^{NMR}16; 2BZM^{NMR}19,20; 2G7I^{XR}19,20	1, 2, 3, 4, 5[d], 6, 7, 8, 12, 13, 15, 16, 19, 20 (of 20)
C4b-binding protein α-chain	P04003	2A55^{NMR}1,2	1, 2 (of 8)
Vaccinia virus complement control protein (VCP)	P10998	1G40^{XR}1–4; 1G44^{XR}1–4; 1VVC^{NMR}3,4; 1VVD^{NMR}3,4; 1VVE^{NMR}3,4; 1E5G^{NMR}2,3; 1RID^{XR}1–4[e]; 1Y8E^{XR}1–4[f]	1, 2, 3, 4 (of 4)
Factor B	P00751	2OK5^{XR}1–3[g], 3HRZ^{XR}1-3[t], 3HS0^{XR}1-3[t]	1, 2, 3 (of 3)
C2	P06681	3ERB^{XR}1-3	1, 2, 3 (of 3)
C1r	P00736	1GPZ^{XR}1,2[h]; 2QY0^{XR}1,2[h]; 1MD7^{XR}2[h]; 1MD8^{XR}2[h]	1, 2 (of 2)
C1s	P09871	1ELV^{XR}2[h]	2 (of 2)
MASP-1	P48740	3GOV^{XR}1,2[h]	1, 2 (of 2)
MASP-2	O00187	1Q3X^{XR}2[h]; 1ZJK^{XR}1,2[h]	1, 2 (of 2)
Apolipoprotein H (β2-GPI)	P02749	1C1Z^{XR}1–5; 1QUB^{XR}1–5; 1G4F^{NMR}5; 1G4G^{NMR}5	1, 2, 3, 4,5 (of 5)[i]
GABA-B receptor 1α [j]	Q9Z0U4	1SS2^{NMR}2 (*cis* X-Pro form); 1SRZ^{NMR}2 (*trans* X-Pro form)	2 (of 2)[k]
Corticotrophin releasing factor receptor 2β[l]	Q60748	1U34^{NMR}1; 2JNC^{NMR}1[m]; 2JND^{NMR}1[m]	1 (of 1)[n]
Interleukin-2 receptor α-chain[o]	P01589	1Z92^{XR}1,2; 2B5I^{XR}1,2; 2ERJ^{XR}1,2	1, 2 (of 2)
Interleukin-15 receptor α-chain	Q13261	2ERS^{NMR}1; 2PSM^{XR}1[q,l]; 2Z3R^{XR}1[q]; 2Z3Q^{XR}1[q]	1 (of 1)

CCP-containing protein	SwissProt Accession no.	PDB code(s)	Modules solved
Seizure 6-like protein isoform 3	Q9BYH1	2YRA[NMR]3	3 (of 5)
CUB and sushi domain-containing protein 1 (CSMD1)	Q96PZ7	2EHF[NMR]3	3 (of 28)
Complement receptor 1-related/gene protein y (CRRY)	Q63135	2VYB[XR]1-4[u]	1, 2, 3, 4 (of 6 or 7)

[a] Derived from the PDB (http://www.rcsb.org/pdb) IDs are followed by a coded footnote (see below) and the relevant module numbers. Citations may be found at the PDB. NMR: structure solved in solution using NMR; XR: structure solved by X-ray diffraction.
[b] Solved in complex with C3d.
[c] Solved in complex with adenovirus type 11 knob.
[d] Coordinates available at http://www.bionmr.chem.ed.ac.uk/bionmr/public_html/ccp-db.html
[e] Solved in complex with heparin-derived octasaccharide.
[f] Solved in complex with suramin.
[g] This is the structure of intact factor B.
[h] This structure also contains a protease domain.
[i] The fifth, C-terminal domain of β2-GPI is CCP-like.
[j] The rat sequence was expressed for this structural work.
[k] The first CCP is reported to be disordered.
[l] The mouse sequence was expressed for this structural work.
[m] Solved in complex with astressin.
[n] This domain is CCP-like.
[o] This is the structure of IL-2-receptor α-chain extracellular region complexed to IL-2 – the CCP-like domains are strand swapped.
[P] Solved in complex with sucrose octasulfate.
[q] Structure of IL-15-receptor α-chain complexed to IL-15.
[r] Solved in complex with intact C3b.
[s] Solved in complex with *Neisseria meningitidis* factor H binding protein.
[t] Solved in complex with cobra venom factor (CVF).
[u] The CRRY protein sequence is from rat (on hold in PDB).