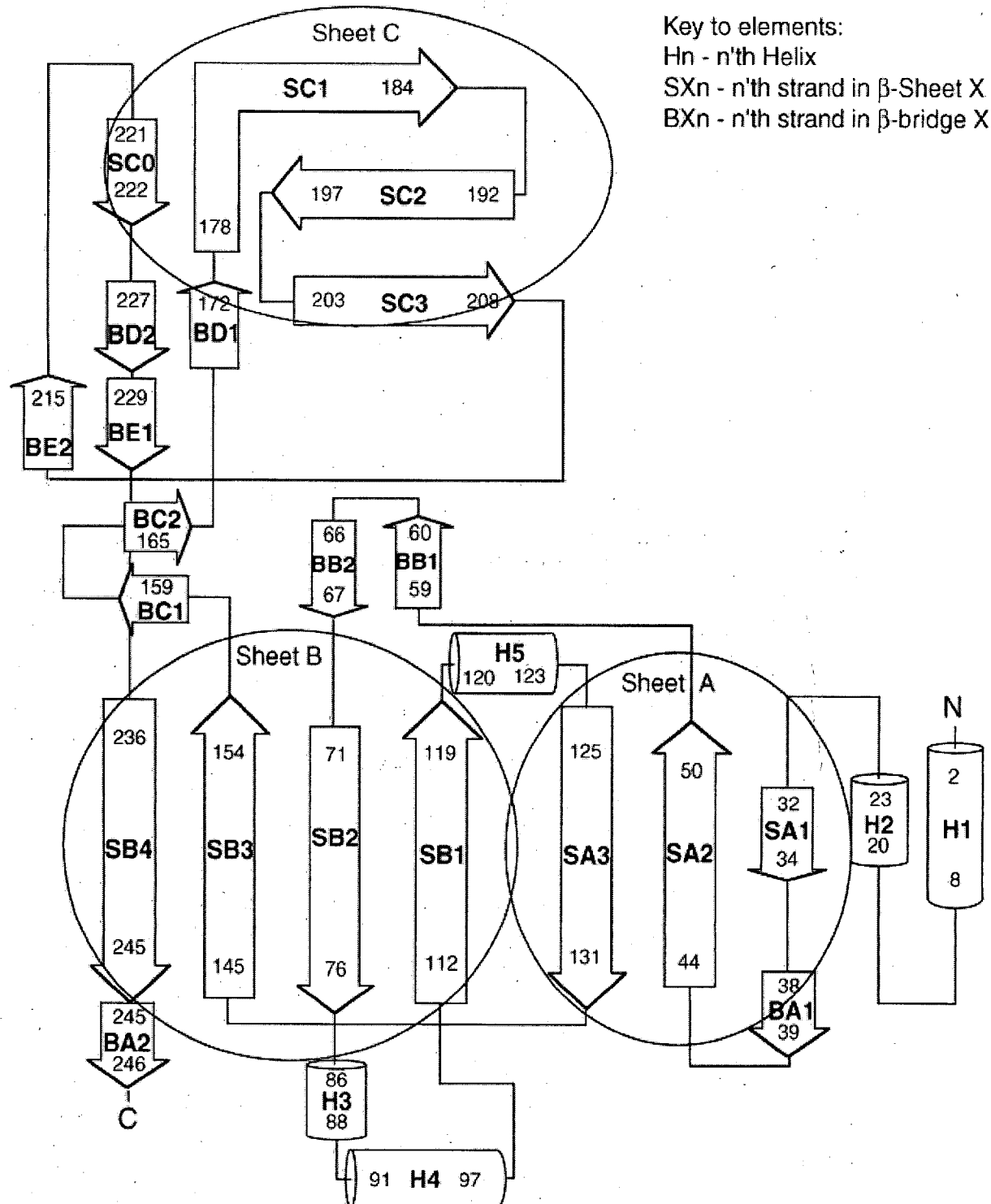


Secondary structure elements of *C.reinhardtii* cytochrome f:



The predominant motif is beta-sheet, with three large sheets: sheet A (3 strands) and B (four strands) are in the large domain, while sheet C, with 4 strands is in the small domain. All are antiparallel. Five "beta-bridges" have beta-sheet type hydrogen bonding but involve only two strands with one or two residues in each. Helices H2 and H3 are 3-10 helices, the others are conventional alpha helices.

Table A. Parameters of the H-bonded Water Chain:

Water	Water O Atom			Partner	H-bonding Atom					
	B factor (Å²)				Distance (Å)			B factor (Å²)		
	(residue number)									
	\ Monomer				Monomer			Monomer		
	A	B	C		A	B	C	A	B	C
W1	14.1	12.6	17.8	W2	2.9	2.8	2.6	11.6	13.9	20.2
	(1041	1201	1249)	Q158 OE1	2.7	2.9	3.1	10.9	12.6	16.7
				N233 ND2	2.9	3.0	3.0	12.8	12.8	20.2
				A27 N	3.2	3.1	3.0	16.0	12.7	26.5
				L26 N	3.6	3.5	3.7	17.3	12.6	23.9
W2	11.6	13.9	20.2	W1	2.9	2.8	2.6	14.1	12.6	17.8
	(1040	1333	1435)	W3	2.8	2.9	2.7	10.6	9.5	12.1
				H25 ND1	2.5	2.4	2.4	23.7	14.4	23.5
				N153 OD1	2.5	2.5	2.6	11.2	15.6	20.4
				G155 O	3.1	3.5	3.5	11.7	10.6	15.7
				R154 O	3.1	3.2	3.3	16.8	15.1	19.4
				G236 N	3.3	3.3	3.4	10.8	14.0	19.4
W3	10.6	9.5	12.1	W2	2.8	2.9	2.7	11.6	13.9	20.2
	(1155	1030	1224)	W4	2.8	2.9	2.8	14.2	9.5	17.7
				R156 O	2.7	2.9	2.8	14.7	13.2	16.2
				R156 N	3.4	3.4	3.4	13.8	13.5	16.6
				G155 O	3.4	3.5	3.5	11.7	10.6	15.7
				N233 OD1	2.5	2.5	2.7	12.5	13.0	20.3
				G235 N	3.5	3.5	3.6	13.6	12.0	20.2
W4	14.2	9.5	17.7	W3	2.8	2.9	2.8	10.6	9.5	12.1
	(1015	1054	1018)	W5	3.4	3.4	3.5	13.6	13.0	19.0
				Q59 OE1	3.0	2.9	2.9	14.4	14.0	19.5
				N233 OD1	2.9	3.0	2.9	12.5	13.0	20.3
				N168 ND2	3.1	3.1	3.1	15.7	16.8	19.7
				V234 N	3.4	3.4	3.4	13.8	12.1	20.3
				G235 N	3.3	3.2	3.0	13.6	12.0	20.2
W5	13.6	13.0	19.0	W4	3.4	3.4	3.5	14.2	9.5	17.7
	(1039	1059	1274)	P232 O	2.7	2.5	2.7	13.0	12.9	22.4
				N168 OD1	2.6	2.5	2.5	16.8	16.1	23.6
				V60 N	2.8	2.7	2.7	15.7	15.9	21.0
W6	14.8	28.9	30.4	W7	3.0	2.5	2.8	26.5	33.9	29.3
	(1377	1749	1517)	P232 O	2.7	2.7	2.6	13.0	12.9	22.4
W7	26.5	33.9	29.3	W6	3.0	2.5	2.8	14.8	28.9	30.4
	(1378	1730	1314)	K58 O	2.5	2.6	2.6	18.0	21.0	26.0
				K66 NZ	3.0	2.9	2.9	35.6	29.2	40.4