

Table 2. Chemical shifts from partial assignment of ^1H NMR spectrum of oxidized *Ht* Cyt c_{552} determined to perform the magnetic axes calculation.

Residue	HN	H α	H β	Others
N3				
E4				
Q5				
L6	7.74	3.84	1.56	H γ 0.73, Q δ 0.14
A7	7.39	3.42	0.87	
K8	7.95	4.21	1.92, 1.73	Q ϵ 3.34
Q9	8.36	3.94	2.20, 2.02	H γ 2.48, 2.32
K10	7.85	4.20	1.73, 1.54	Q ϵ 2.67
G11	7.54	4.13, 3.91		
C12	8.01	3.12	2.38, 2.55	
M13	8.41	6.42	3.02, 2.67	H γ 3.73, 3.09
A14	7.93	4.53	1.55	
C15	8.11	5.69	4.01	
H16	10.55	8.80	11.38, 8.41	H ϵ 12.26
D17	10.55	6.00	3.91, 3.26	
L18	9.24		2.26, 2.05	H γ 1.72, Q δ 1.41, 1.35
K19	8.69		1.94, 1.85	Q γ 1.50, Q δ 1.62, Q ϵ 2.09
A20	9.19		1.67	
K21	8.87	4.56	2.08, 2.01	H γ 1.56, H δ 1.78, H ϵ 2.97
K22	8.44	4.85		H ϵ 3.35, others 2.55, 2.14, 1.96, 1.75
V23	7.85	3.61	1.25	Q γ 0.68, -0.33
G24	8.45			
P25				
A26	9.64	6.02	1.59	
Y27	9.64	4.45	3.08, 2.93	Q δ 6.95, Q ϵ 6.39
A28	9.16	4.08	1.61	
D29	7.14	4.68	2.93	
V30	7.82	3.75	2.13	Q γ 0.74, 0.43
A31	8.23	3.74	1.61	
K32	7.38	4.06	1.95	Q γ 1.50, Q δ 1.79, Q ϵ 3.04

Residue	HN	H α	H β	Others
K33	7.59			Q ϵ 3.91, others 1.33, 1.26, 1.00, 0.73, 0.53
Y34	7.24	4.48	3.27, 2.32	Q δ 7.11, Q ϵ 6.72
A35	7.31	4.06	1.45	
G36	8.69	3.92		
R37	7.74	4.48	2.09, 1.96	H γ 1.73, 1.61, H δ 3.27, 2.86, H ϵ 8.15, H η 6.47
K38				
D39	8.69	4.90	3.05, 2.60	
A40	7.30	3.71	1.52	
V41	8.28	3.12	1.90	Q γ 0.79, 0.75
D42	7.62	4.19	2.58	
Y43	8.42	4.08	3.10, 3.02	Q δ 6.60, Q ϵ 6.72
L44	8.53	3.24	1.57	H γ 1.37, Q δ 0.21, 0.12
A45	8.58	3.45	1.21	
G46	7.71	4.64, 3.20		
K47	7.48	5.33	2.90, 2.01	H γ 1.27, H δ 2.42, 1.79, H ϵ 3.64, 3.48
I48	8.57	4.37	1.38	H γ 0.26, -3.20, Q γ -0.34, Q δ -0.72
K49	7.71	3.81	2.27, 1.87	
K50	9.53	5.19	2.78, 2.67	H γ 2.04, H δ 2.13, H ϵ 3.33
G51	10.62	9.01, 7.07		
G52	10.39	5.71, 4.94		
S53	8.63	4.36	3.62, 3.55	
G54	7.61	4.25, 3.73		
V55	9.83	3.67	1.98	Q γ 1.04, 0.27
W56	9.56	4.22	3.15, 2.24	H δ 1 6.20, H ϵ 1 10.81, H ζ 2 7.06, H ζ 3 7.17, H ϵ 3 7.56, H η 2 6.88
G57	7.40	3.93, 3.72		
S58	8.34	4.36	3.78, 3.67	
V59	6.94	3.84	0.90	Q γ 0.44, -0.14
P60				
M61	9.42		1.36	Q ϵ -17.2, H γ -20.2, -12.8
P62		5.67		2.20, 1.80
P63		5.83		4.21, 3.24, 2.76, 2.55
Q64	9.20	5.06	2.66	H ϵ 8.81, 6.70
N65	8.96	5.00	2.93, 2.71	H δ 7.65, 6.93

Residue	HN	H α	H β	Others
V66	7.62		2.17	Q γ 0.55, 0.33
T67	9.03	4.46		Q γ 1.23
D68	8.91	4.26	2.62	
A69	8.33	3.98	1.31	
E70	7.81		2.28	
A71	8.63	3.33	1.43	
K72	7.68	3.55	1.68, 1.27	H γ 1.06, H δ 1.49, H ϵ 2.78
Q73	7.75	3.84		
L74	8.28	3.55		H γ 1.27, Q δ 0.15, -0.05
A75	7.73	2.90	1.08	
Q76	8.03	3.59	2.03, 1.86	H γ 2.37, 2.20
W77	7.71	4.13	3.06	H δ 1 7.12, H ϵ 1 10.32, H ζ 2 7.26, H η 2 6.64, H ζ 3 5.61, H ϵ 3 6.72
I78	7.95	2.17	0.95	H γ 0.89, -0.40, Q γ -0.40, Q δ -1.21
L79	7.28	3.62		H γ 1.41, Q δ 0.67, 0.56
S80	7.46	4.31	4.01, 3.80	
I81	7.07	3.67	1.67	H γ 0.84, Q δ 0.03
K82	7.78	4.23	1.84, 1.66	H γ 1.38, H ϵ 3.00

Heme assignments

1-CH ₃	18.16	β - <i>meso</i>	-0.42	7-H α 1	12.98
2-H α	1.26	5-CH ₃	22.89	7-H α 2	2.20
2-CH ₃	0.54	6-H α 1	3.60	7-H β 1	
α - <i>meso</i>	1.54	6-H α 2		7-H β 2	-1.13
3-CH ₃	22.29	6-H β 1		8-CH ₃	24.28
4-H α	0.25	6-H β 2		δ - <i>meso</i>	-1.17
4-CH ₃	1.20	γ - <i>meso</i>	9.07		

The sample was in 120 mM sodium acetate-*d*₃ buffer (pH 5.0), 5-fold excess of ferricyanide, at 300 K. Resultant pseudocontact shifts used in the calculation are reported in Table 4.