## **SUPPORTING INFORMATION Liu et al. Biochemistry 2008**

Table SI\_1  ${\rm Fe_{a3} - Cu_B \ distance \ comparisons \ among \ different \ cytochrome \ } c \ {\rm oxidases}$ 

PDB code	Fe <sub>a3</sub> - Cu <sub>B</sub>	PDB code	Fe <sub>a3</sub> - Cu <sub>B</sub>	Δ (red - ox)
Oxidized <sup>a</sup>	$(\mathring{A})^b$	Reduced <sup>c,d</sup>	(Å)	$(Fe_{a3} - Cu_B)$
enzyme		enzyme		
1V54	5.0	1V55	5.1	+ 0.1
Bovine		Bovine		
Fully		Reduced crystal		
oxidized				
1OCC	4.9	1OCR	5.2	+ 0.3
Fully		Bovine		
oxidized		Reduced crystal		
2EIL	4.8	2EIK	5.1	+ 0.3
Bovine		Bovine		
Fully		Reduced crystal		
oxidized				
2EIN	4.6	2EIM	4.1	- 0.5
Bovine		Bovine		(?)
Fully		Reduced crystal		
oxidized				
1QLE	5.5	N/A	N/A	
$Pd aa_3$				
oxidized				
1XME	4.4			
$Tt ba_3$				
oxidized				
1EHK	4.4			
$Tt ba_3$				
oxidized				
3EH4	4.7	3EH3 <sup>c</sup> & 3EH5 <sup>d</sup>	5.1 & 5.0	+ 0.4 & 0.3
$Tt ba_3$		$Tt ba_3$		
This work.		This work.		

<sup>&</sup>lt;sup>a</sup>Most likely represents the X-ray radiation reduced enzyme. <sup>b</sup>Distances reported to the first decimal place. <sup>c</sup>Treatment of oxidized crystals with dithionite. <sup>d</sup>Crystal prepared from reduced enzyme.