

Structural changes and picosecond to second dynamics of cytochrome c in interaction with nitric oxide in ferrous and ferric redox states

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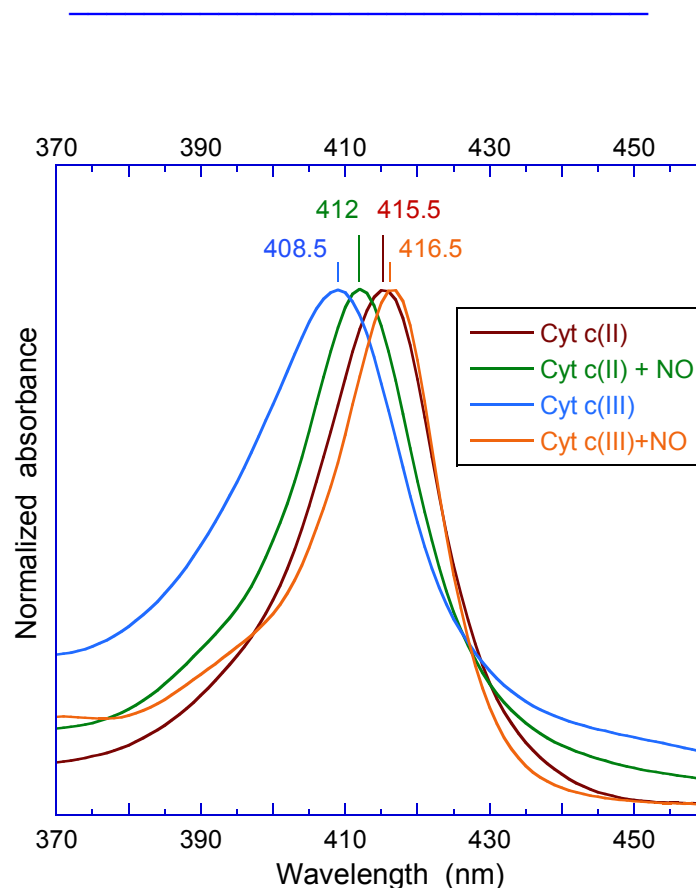


Figure S1. comparison of the Soret bands of the ferric and ferrous states of native and nitrosylated Cyt c.

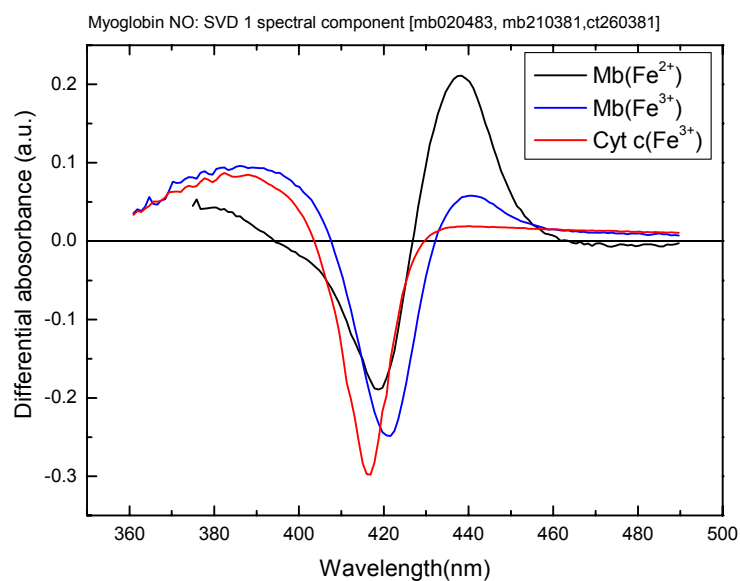


Figure S2. Comparison of the transient spectra of ferrous and ferric myoglobin with that of ferric Cyt *c* after the photodissociation of NO.

Table S1. Time constants and relative amplitudes of NO geminate rebinding of NO for various proteins which are 6-coordinate in their nitrosylated state.

Protein	NO geminate rebinding phases		Constant
	$\tau_{\text{gem1}} (A_1)^a$	$\tau_{\text{gem2}} (A_2)^a$	A_3
Fe ²⁺ Cyt <i>c</i>	9.2 ps (92.7)	55 ps (5.7)	1.5
Fe ³⁺ Cyt <i>c</i>	10.3 ps (88)	54.4 ps (8.5)	3.5
Lp-HbI (b)	8.0 ps (36)	90 ps (62)	2
Lp-HbII/III (b)	11 ps (83)	61 ps (15)	2
Fe ²⁺ Myoglobin (c)	13 ps (40)	148 ps (50)	10
Fe ³⁺ Myoglobin (c)	24 ps (14)	208 ps (48)	38
Hemoglobin (c)	10.8 ps (74)	61 ps (22)	4
Dehaloperoxidase (c)	14 ps (61)	65 ps (38)	1

(a) The amplitudes are expressed as % of the normalized transient absorption (calculated without the contributions of vibrational relaxation). All proteins are in the ferrous state except when indicated. Lp-HbI: type I hemoglobin from the invertebrate *Lucina pectinata*. Data from:

(b) Ramos-Alvarez, C.; Yoo, B.-K.; Pietri, R.; Lamarre, I.; Martin, J.-L.; Lopez-Garriga, J.; Negrerie, M. *Biochemistry* **2013**, *52*, 7007–7021.

(c) Kruglik, S. G.; Yoo, B.-K.; Franzen, S.; Vos, M. H.; Martin, J.-L.; Negrerie, M. *Proc. Natl. Acad. Sci. USA*. **2010**, *107*, 13678–13783.