Resonance Raman Spectra of Five-Coordinate Heme-Nitrosyl Cytochromes *c*′: Effect of the Proximal Heme-NO Environment

Amy E. Servid[†], *Alison L. McKay*[†], *Cherry A. Davis*[†], *Elizabeth M. Garton*[†], *Andreea Manole*[§], *Paul S. Dobbin*[§], *Michael A. Hough*[§], *Colin R. Andrew*[†,]*

[†]Department of Chemistry & Biochemistry, Eastern Oregon University, La Grande, Oregon 97850, [§]School of Biological Sciences, University of Essex, Wivenhoe Park, Colchester, CO4 3SQ, UK.

SUPPLEMENTARY INFORMATION

Table S1. pH-dependence of 5cNO RR frequencies (cm^{-1}) of wt and R124A AXCP at 100 K.

AXCP	pH	ν(NO)	($\Delta^{15}N^{18}O$)	($\Delta^{15}NO$)	ν(FeNO)	($\Delta^{15}N^{18}O$)
wt	5.0	1664	(-64)		530	(-15)
	7.0	1664		(-31)	531	(-16)
	9.5	1664	(-65)		533	(-17)
R124A	5.0	1669	(-66)		535	(-16)
	7.0	1671		(-32)	536	(-15)
	9.5	1673	(-69)		534	(-17)

Figure S1. RR spectra of 5cNO wt AXCP (100 K) at pH 9.5 (A and B) and pH 5.0 (C and D). Left panel: high frequency range; right panel: low-frequency range. Samples prepared with ^{14}NO (black traces) and $^{15}N^{18}O$ (magenta traces). Isotope difference spectra (^{14}NO -$^{15}N^{18}O$, blue traces) identify ν(NO) and ν(FeNO) vibrations. Asterisks denote vibrations attributed to ν(FeNO) from a minor 6cNO population.

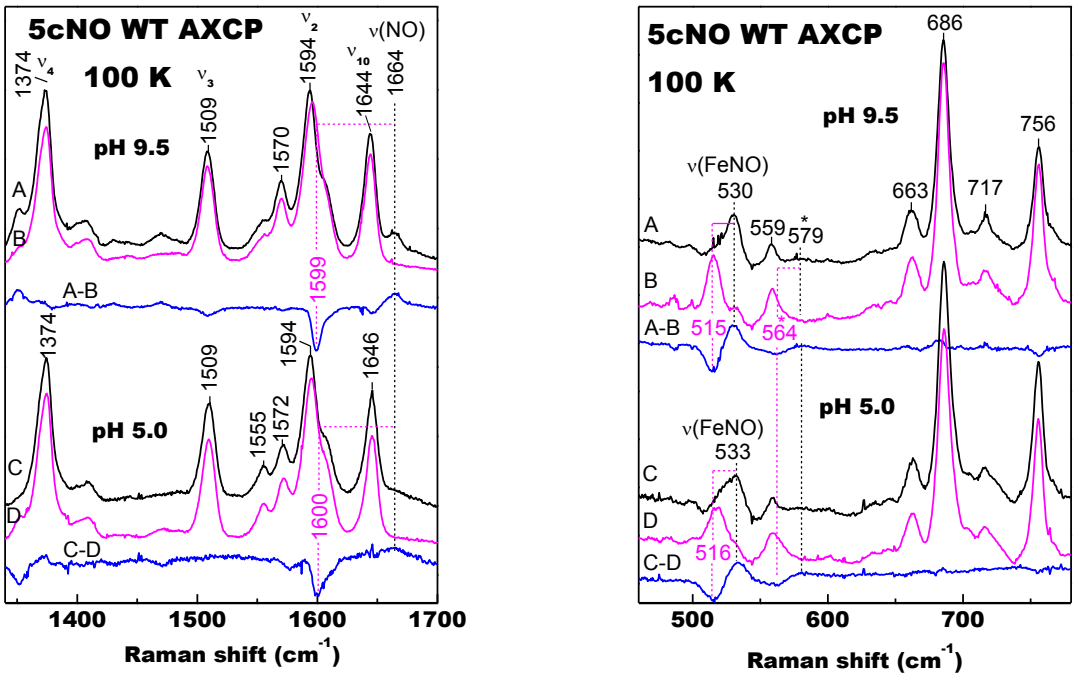

Figure S2. RR spectra of 5cNO R124A AXCP (100 K) at pH 9.5 (A and B) and pH 5.0 (C and D). Left panel: high frequency range; right panel: low-frequency range. Samples prepared with ^{14}NO (black traces) and $^{15}N^{18}O$ (magenta traces). Isotope difference spectra (^{14}NO -$^{15}N^{18}O$, blue traces) identify ν(NO) and ν(FeNO) vibrations.