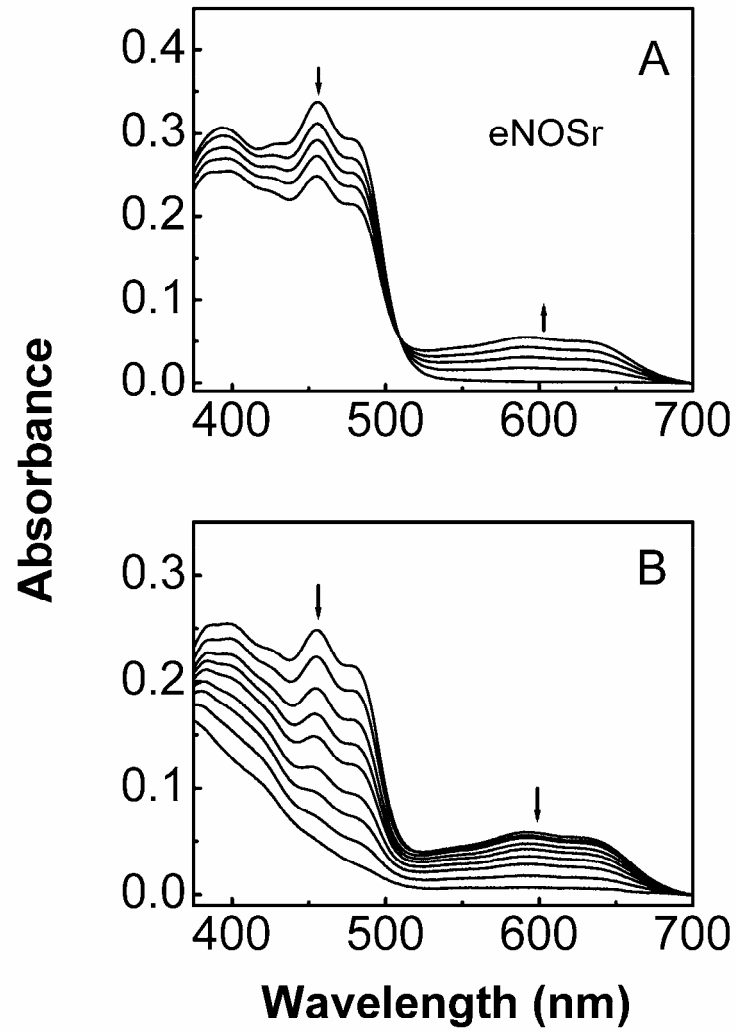


SUPPLEMENTARY

FIGURE 1. Anaerobic equilibrium photoreduction of eNOSr protein. Visible spectra were obtained during the photoreduction of eNOSr in the absence of NADP⁺ with normalization at 700 nm. Panel A contains spectra that preceded the spectra in panel B. Arrows indicate direction of absorbance change.



SUPPLEMENTARY**Table 1. Summary of results from reactions of mixing NOSr proteins with excess cytochrome c**

An excess of cytochrome c was mixed with NOSr proteins starting either as their fully-reduced or one-electron reduced form in a stopped-flow instrument at 10 °C. Values are derived from data in Figures 7 & 8. NA is not applicable.

Protein	Condition	Calculated Activity (min ⁻¹)	Time for 1 st turnover (s)	% fast phase in 1 st turnover
eNOSr (FMNH ₂)	- CaM	29	1.8	20
	+ CaM	72	0.1	90-100
eNOSr (FMNsq)	- CaM	27	2.1	NA
	+ CaM	50	1.2	NA
nNOSr (FMNH ₂)	- CaM	489	0.03	50-75
	+ CaM	1261	dead time	100
nNOSr (FMNsq)	- CaM	276	0.21	NA
	+ CaM	829	0.09	NA