

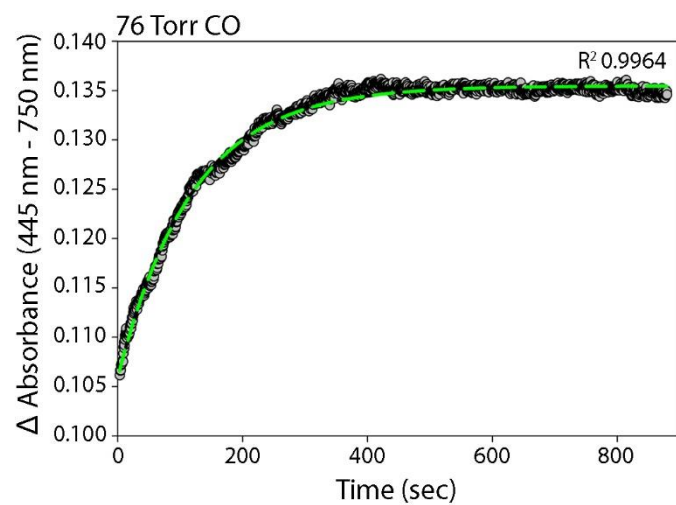
Supplemental Table S1. Antibodies used in this study.

Antibody	Type	Concentration	Supplier, reference no.
α -Globin	Polyclonal	10 μ g/mL (histology)	Abcam, Ab92492
α -Globin	Polyclonal	(Western blot)	Home-made
eNOS	Monoclonal	1 μ g/mL (histology) 0.2 μ g/mL (Western blot)	BD 610297
CyB5a	Polyclonal	4 μ g/mL (histology) 0.4 μ g/mL (Western blot)	Proteintech, 12365-1-AP
CyB5b	Polyclonal	2.5 μ g/mL (histology) 0.25 μ g/mL (Western blot)	Proteintech, 15469-1-AP
CyB5R3	Polyclonal	0.4 μ g/mL (histology) 0.2 μ g/mL (Western blot)	Proteintech, 10894-1-AP
Goat anti-rabbit IgG	HRP conjugate	0.05 μ g/mL	Jackson ImmunoResearch Laboratories, 111-035-003
Goat anti-mouse IgG	HRP conjugate	0.05 μ g/mL	Jackson ImmunoResearch Laboratories, 115-035-003

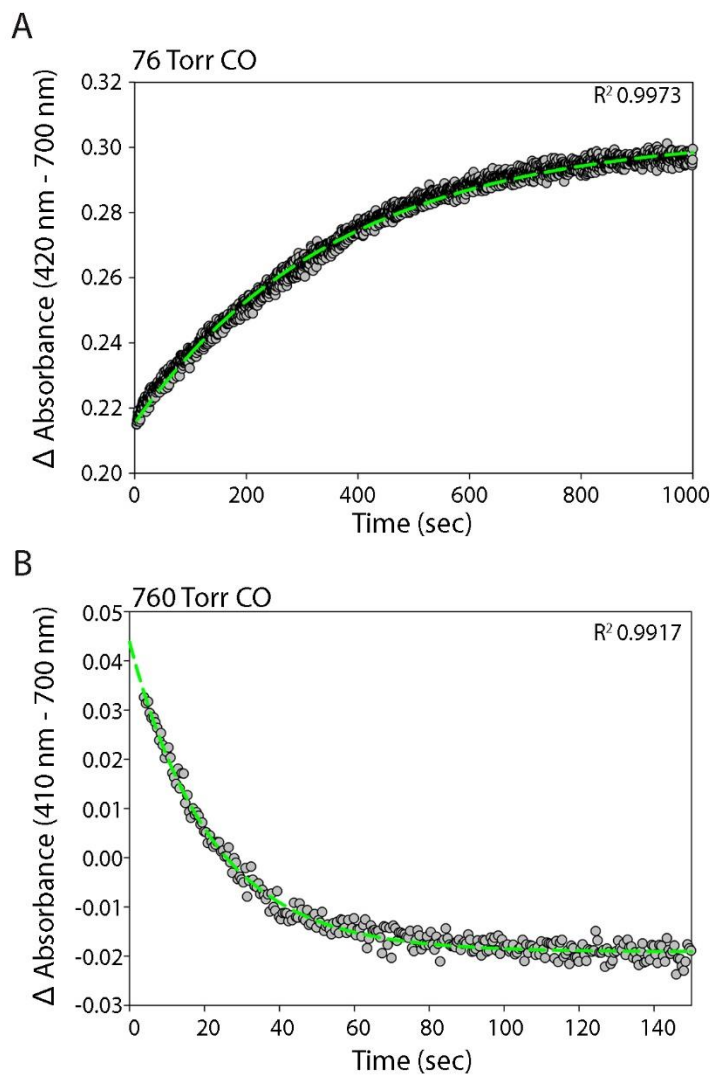
Supplemental Table S2. Oligonucleotide primers used for RT-qPCR.

GENE	ACCESSION	FORWARD PRIMER, 5'→ 3'	REVERSE PRIMER, 5'→ 3'
<i>HBA</i>	NM_008218	GCTCTCTGGGGAAGACAAAA	GCCGTGGCTTACATCAAAGT
<i>HBB</i>	NM_001278161	TGTTGACTCACAACCCCAGA	CTGGGTCCAAGGGTAGACAA
<i>NOS3</i>	NM_008713	GCACCCAGAGCTTTTCTTTG	GTCAACCGAACGAAGTGACA
<i>CYB5A</i>	NM_025797	CTGGGTGATCCTGCATCATA	ACAGTTCTCGTGCATCCGTA
<i>CYB5B</i>	NM_025558	CTGCGATGAGAGGAGGAGAC	CTCTGGCGGATGAAAGACTC
<i>CYB5R3</i>	NM_029787	GGAAGAGAGAGGGAGGGAGA	GGCAGGTAGGTGGTTAGGTG
<i>CYGB</i>	NM_030206	GAGTTGGGGTGAGTCAGCTT	CCGTGGAGACCAGGTAGATG
<i>ACTB</i>	NM_007393	CCATCTACGAGGGCTATGCT	TTTGATGTACGCACGATTT

HBA, α -globin; *HBB*, β -globin; *NOS3*, eNOS; *CYB5A*, cytochrome *b*₅ type A; *CYB5B*, cytochrome *b*₅ type B; *CYB5R3*, cytochrome *b*₅ reductase 3; *CYGB*, cytoglobin; *ACTB*, β -actin



Supplemental Figure S1. eNOS reduction. eNOS reduction kinetics after mixing NADPH under 76 Torr of CO. The dashed lines represent the exponential rise fit, with the associated determination coefficient (R^2).



Supplemental Figure S2. α -Globin reduction. α -Globin-AHSP reduction kinetics, after mixing with CyB5R3/CyB5a (A) or eNOS (B) pre-incubated under anaerobic conditions in the presence of NADH or NADPH, respectively, under CO. The dashed lines represent the exponential rise or decay fits, with the associated determination coefficient (R^2).