Supporting information:

Oxygenation monitoring of tissue vasculature by resonance Raman spectroscopy

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Contents:
1) A table listing resonance Raman spectral assignments for forms of equine hemoglobin given in Figure 5 of the manuscript.
2) A figure containing resonance Raman spectra of horse heart myoglobin in the oxy, deoxy and metmyoglobin forms.

Table S-I. Resonance Raman band assignments based on forms of equine hemoglobin (manuscript Figure 5), obtained with 406.7 nm excitation.

mode	Observed polarization	oxy Hb	deoxy Hb	met Hb
ν_{10} (b_{1g})	dp	1642	1609	1610
$\nu_{C=C}$ (p)	p	1623	1622	1623
ν_{37} (e_u)	p	1608		1583
ν_2 (a_{1g})	p	1585	1569	1564
ν_{11} (b_{1g})	dp	1564	1549	
ν_{38} (e_u)	p	1553	1527	1514
ν_3 (a_{1g})	p	1507	1475	1481
Vinyl	dp	1481		
ν_{28} (b_{2g})	dp	1428	1428	1426
ν_{29} (b_{2g})	dp	1398	1394	1401
ν_{12} (b_{1g})	dp		1391	1387
ν_4 (a_{1g})	p	1378	1359	1371
propionate CH_2 wag		1286	1282	1283
propionate CH_2 twist	dp	1225	1225	
ν_{30} (e_u)		1173 dp	1175 p	1170
ν_{14} (b_{1g})	dp	1136	1132	1134
ν_5 (a_{1g})	p	1120	1116	1123
vinyl CH_2 rock	p		1088	
vinyl CH_2 rock	dp		1054	1061
ν_{46} (e_u)		940		
γ_4 (a_{1u})		830	826	
ν_{32} (b_{2g})		790	789	
ν_{15} (b_{1g})		749	747	
ν_7 (a_{1g})	p	674		674

Figure S-1. Resonance Raman spectra of forms of horse heart myoglobin (Mb) (Sigma, St Louis MO), pH 7.4, obtained with 5 mw of 406.7 nm excitation. a) oxyMb, b) deoxyMb, and c) metMb.