

Supporting Information

Photoinduced cytotoxic activity of a rare ruthenium nitrosyl phenanthroline complex showing NO generation in human cells

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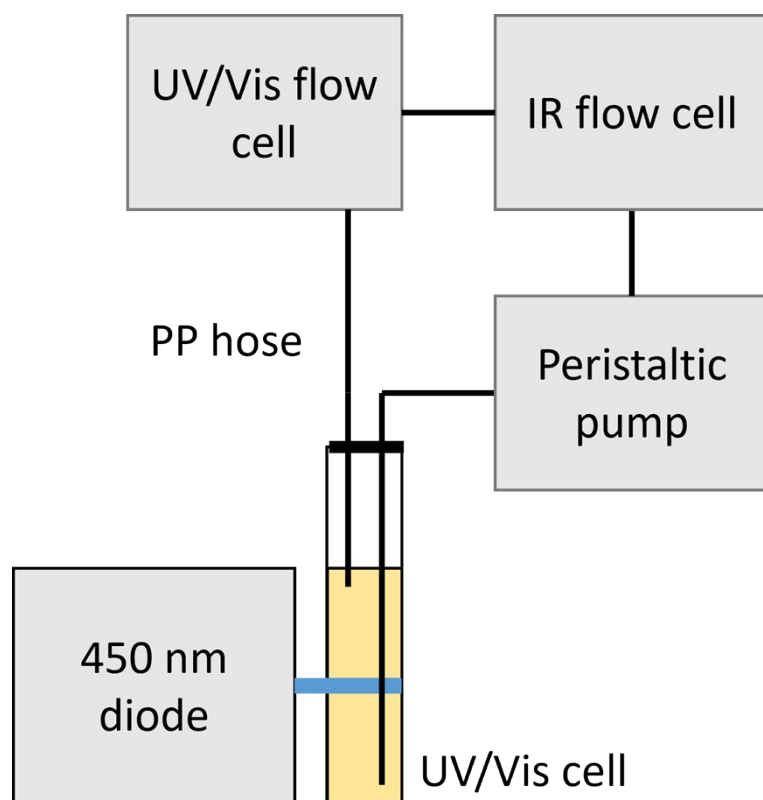
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Table S1. Crystal data and refinement details.

Identification code	[RuNO(Phen)(NO ₂) ₂ OH]·DMF (1a)	[RuNO(Phen)(NO ₂) ₂ OH] (1)
Empirical formula	C ₁₅ H ₁₆ N ₆ O ₇ Ru ₁	C ₁₂ H ₉ N ₅ O ₆ Ru ₁
Formula weight	493.4	420.3
Temperature/K	150	296
Crystal system	triclinic	monoclinic
Space group	P-1	P2 ₁ /n
a/Å	7.0875(1)	10.6515(8)
b/Å	10.3691(2)	7.2960(6)
c/Å	12.6632(3)	18.6158(11)
α/°	92.948(1)	90
β/°	93.662(1)	90.038(3)
γ/°	103.612(1)	90
Volume/Å ³	900.52(3)	1446.70(18)
Z	2	4
ρ _{calc} /cm ³	1.82	1.93
μ/mm ⁻¹	0.926	1.127
F(000)	493.9	832

Crystal size/mm ³	1 × 0.8 × 0.4	0.04 × 0.08 × 0.19
Radiation	Mo Kα (λ = 0.71073)	MoKα (λ = 0.71073)
2θ range for data collection/°	3.24 to 63.1	4.404 to 52.854
Index ranges	-10 ≤ h ≤ 10, -14 ≤ k ≤ 14, -18 ≤ l ≤ 17	-11 ≤ h ≤ 13, -9 ≤ k ≤ 9, -22 ≤ l ≤ 18
Reflections collected	19478	8183
Independent reflections	5591 [R _{int} = 0.0245, R _{sigma} = 0.0263]	2844 [R _{int} = 0.0565, R _{sigma} = 0.0656]
Data/restraints/parameters	5591/0/266	2844/0/219
Goodness-of-fit on F ²	1.006	1.16
Final R indexes [I>=2σ (I)]	R ₁ = 0.0243, wR ₂ = 0.0687	R ₁ = 0.0609, wR ₂ = 0.1286
Final R indexes [all data]	R ₁ = 0.0289, wR ₂ = 0.0776	R ₁ = 0.0831, wR ₂ = 0.1381
Largest diff. peak/hole/e Å ⁻³	0.86/-0.51	1.01/-1.10



Scheme S1. UV-vis-IR-flow-through system.

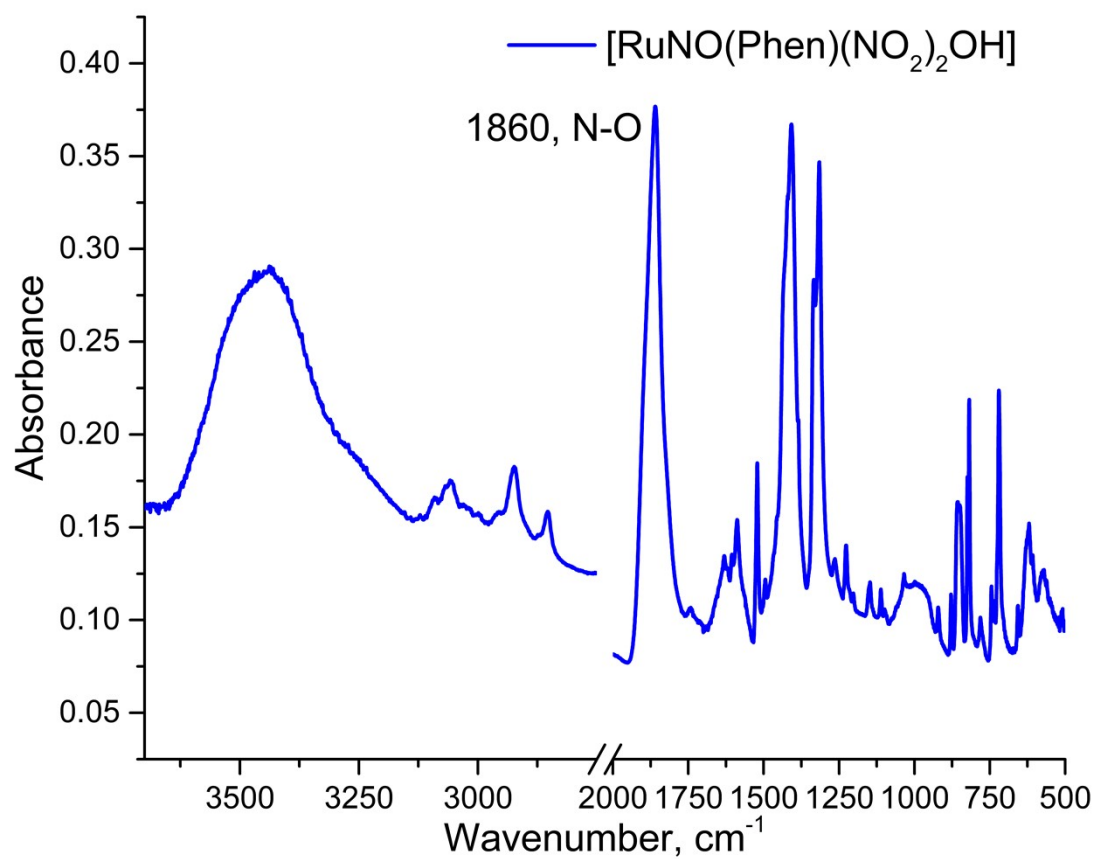


Figure S1. IR-spectrum of $[\text{RuNO}(\text{Phen})(\text{NO}_2)_2\text{OH}]$ (**1**).

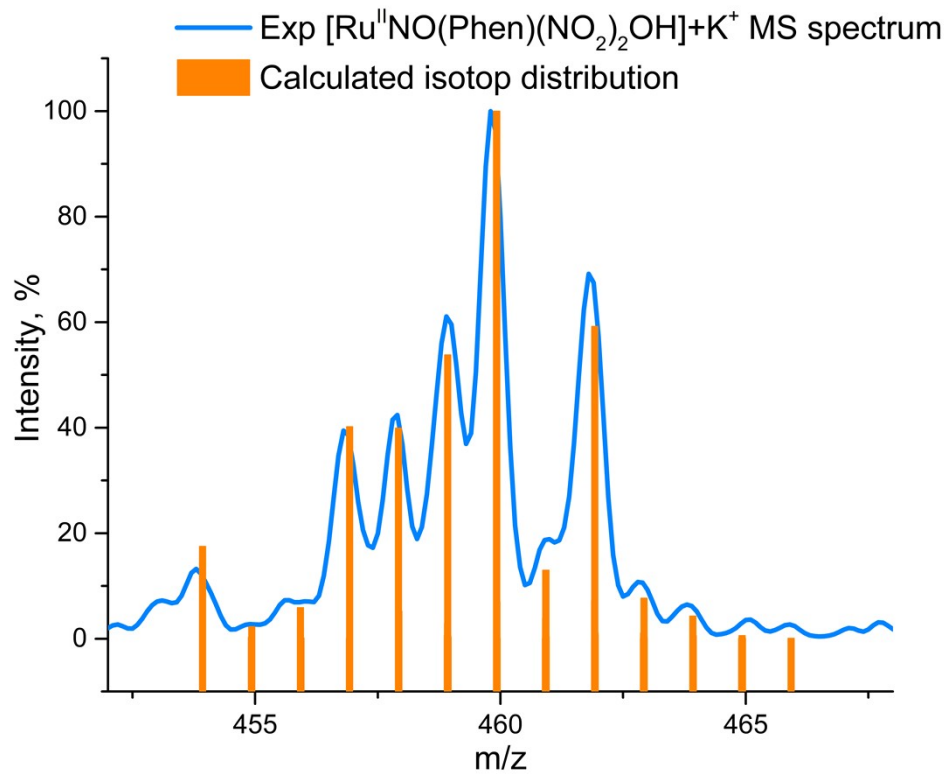


Figure S2. Experimental ESI-MS spectrum of $[\text{RuNO}(\text{Phen})(\text{NO}_2)_2\text{OH}] + \text{K}^+$ and calculated isotope distribution.

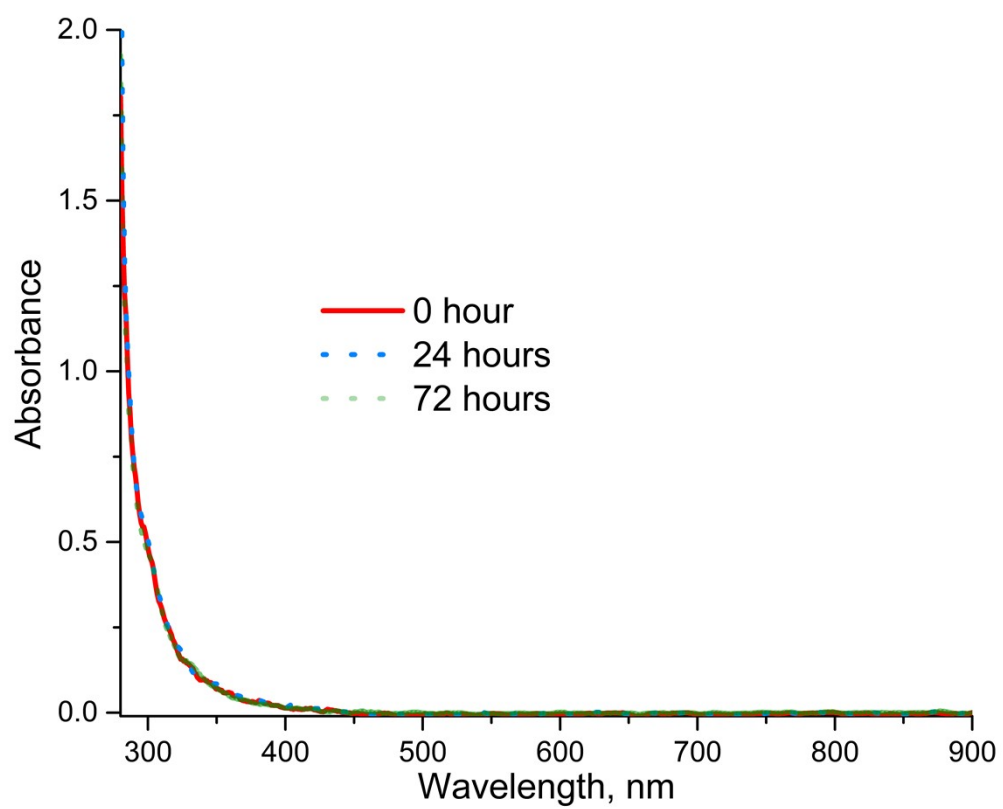


Figure S3. Stability test of [RuNO(Phen)(NO₂)₂OH] in PBS (5 × 10⁻⁵ M).