

Supporting Information

Interaction of NAMI-A complex with nitric oxide under physiological conditions

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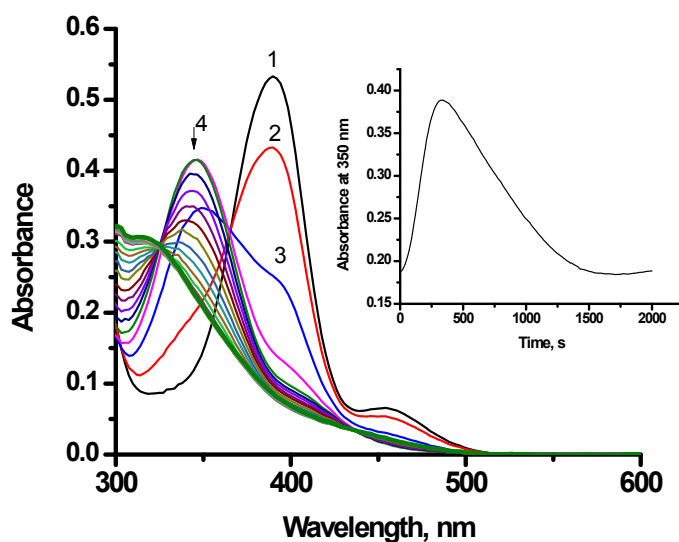


Figure S1. Spectral changes observed during the hydrolysis of NAMI-A. Spectra recorded for 2000 s every 100 s, 1, 2, 3, 4 – denote first, second, third and fourth registered spectrum. Experimental conditions: [Tris buffer] = 0.1 M, pH = 7.4, 37 °C, 0.2 M NaCl. Inset: Absorbance changes at 350 nm as a function of time.

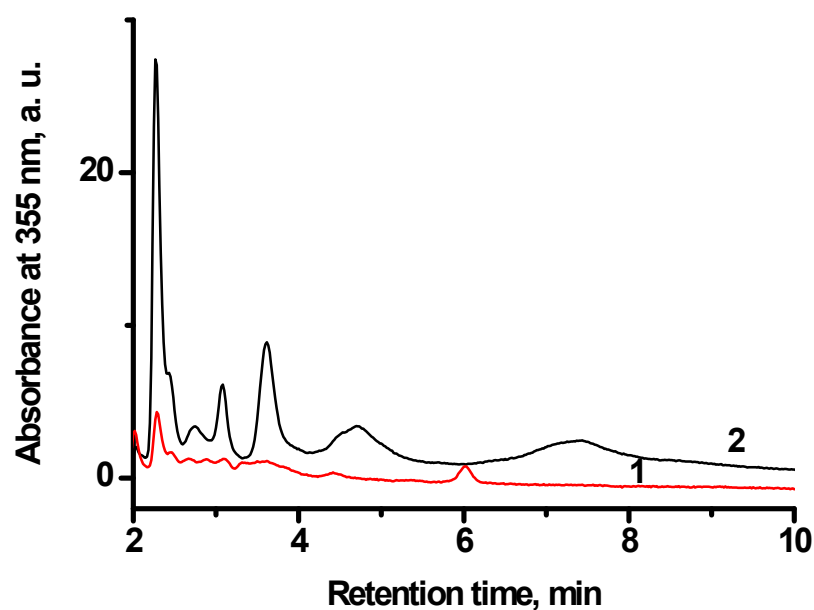


Figure S2. Comparison of the elution profiles registered at 355 nm for NAMI-A kept for 30 min in buffer solution in the presence (1 - red line) and the absence (2 - black line) of nitric oxide. Experimental conditions: [NAMI-A] = 0.5 mM, [NO] = 1 mM, [Tris buffer] = 0.1 M, pH = 7.4, [NaCl] = 0.2 M, 37 °C.

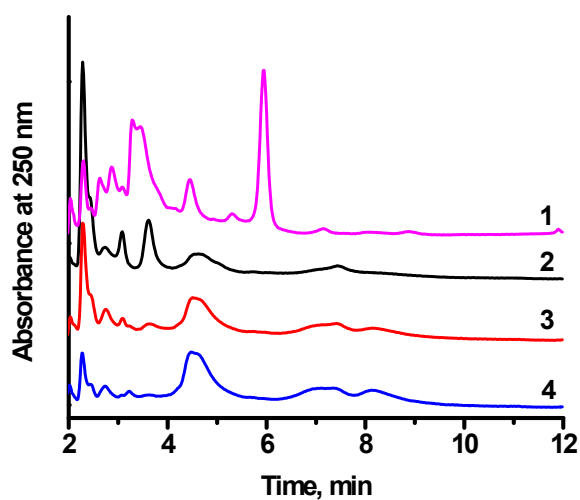


Figure S3. Comparison of the elution profiles registered at 250 nm for NAMI-A kept for 30 min in buffer solution in the presence (1 - pink line) of nitric oxide and in the absence of nitric oxide for 30 (2 - black line), 45 (3 - red line) and 60 min (4 - blue line). Experimental conditions: [NAMI-A] = 0.5 mM, [NO] = 1 mM, [Tris buffer] = 0.1 M, pH = 7.4, [NaCl] = 0.2 M, 37 °C.

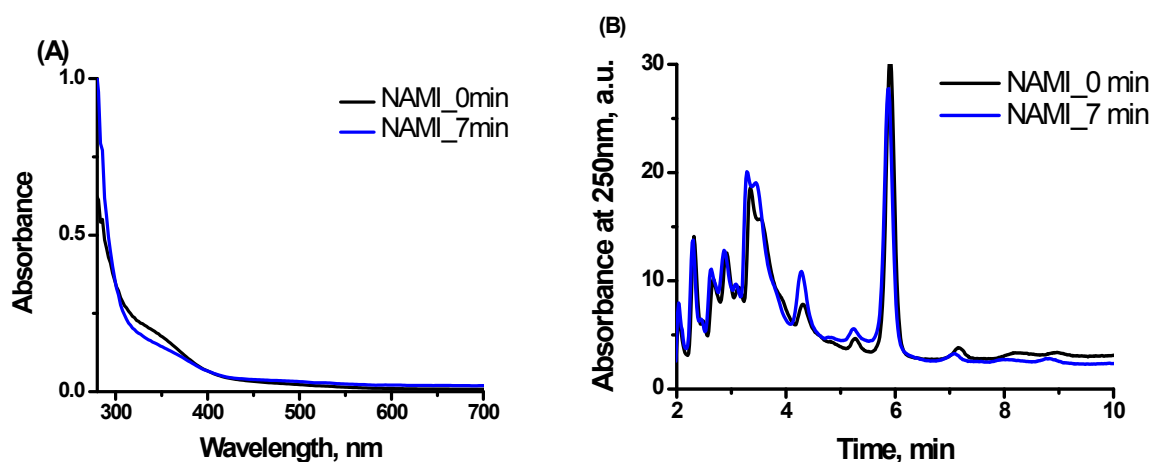


Figure S4. Comparison of the UV-Vis spectra and elution profiles obtained after 30 min reaction of NO with NAMI-A. NAMI-A complex freshly prepared (black line) and 7 min pre-equilibrated with Tris buffer prior NO addition (blue line). Experimental conditions: [NAMI-A] = 0.5 mM, [NO] = 1 mM, [NaCl] = 0.2 M, [Tris buffer] = 0.1 M, pH = 7.4, 37 °C.

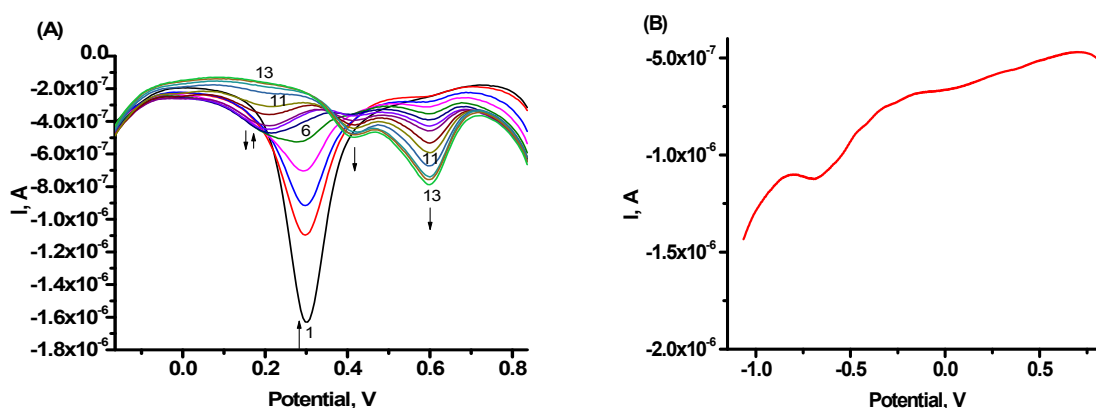


Figure S5. Differential pulse voltammograms representing electrochemical response: (A) after mixing of NAMI-A complex with Tris buffer (pH = 7.4) recorded every 5 minutes (1-7) or 30 minutes 8-13; (B) after mixing of NAMI-A complex with Tris buffer (pH = 7.4) containing NO. Experimental conditions: [NAMI-A] = 0.5 mM, [Tris buffer] = 0.1 M, pH = 7.4, [NaCl] = 0.2 M, [NO] = 1 mM, T = 37 °C.

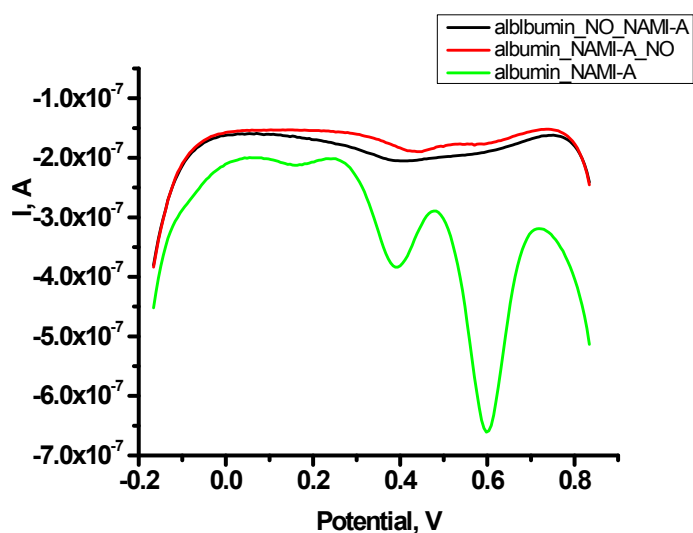


Figure S6. Differential pulse voltammograms representing electrochemical response: after mixing of NAMI-A complex with mixture of albumin and NO (black line); after incubating NAMI-A with albumin for 30 min and then with NO for another 30 min (red line); after incubating NAMI-A with albumin (green line). Experimental conditions: [NAMI-A] = 0.5 mM, [Tris buffer] = 0.1 M, pH = 7.4, [NaCl] = 0.2 M, [NO] = 1 mM, [albumin] = 0.025 mM T = 37 °C.