

Supporting Information

Interaction of $[\text{Ru}^{\text{III}}(\text{edta})(\text{H}_2\text{O})]^-$ with amino acids in aqueous solution. Equilibrium, kinetic and protease inhibition studies

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Scheme I

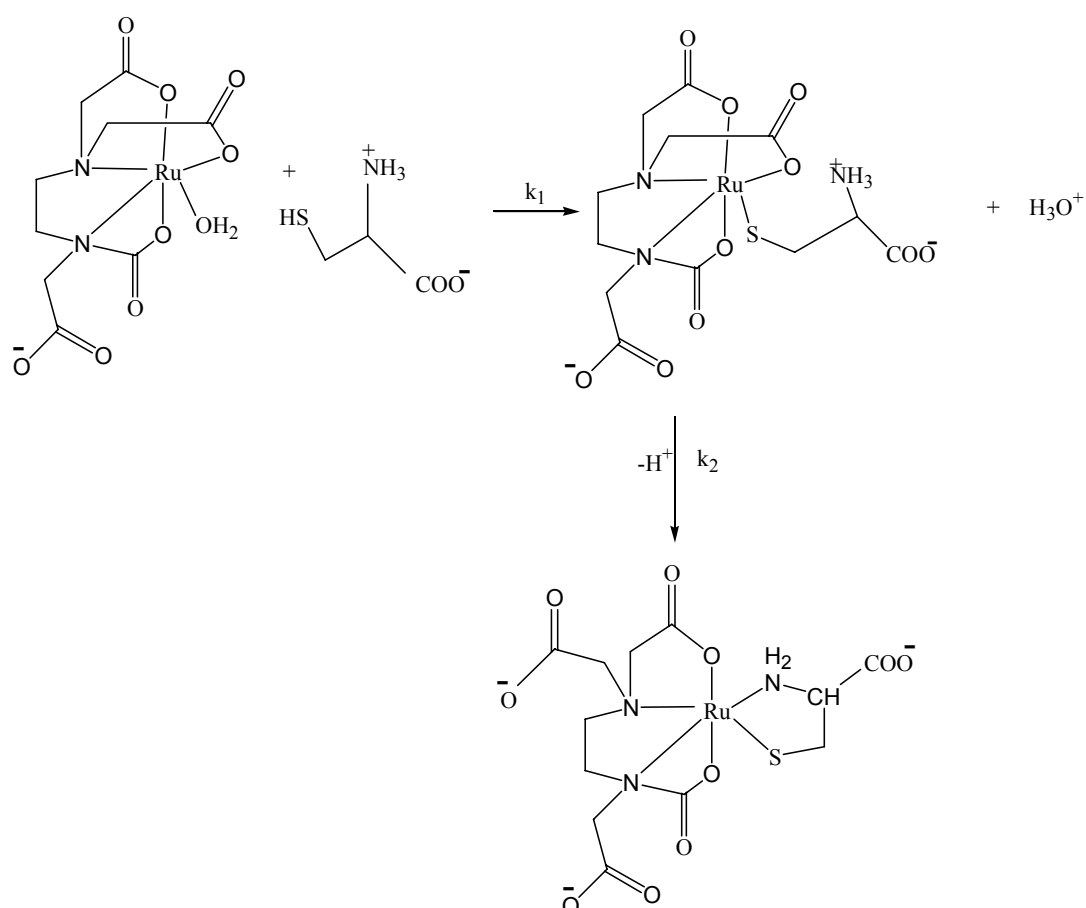


Figure SI-1. Typical kinetic trace for the reaction between 5×10^{-4} M $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^-$ and 0.05 M glycine, pH 6.0 (phosphate buffer) and 25.0 °C. The trace was fitted to two exponentials by following the decrease in absorbance at 390 nm. The lower trace represents the difference between the experimental and calculated curves.

Figure SI-2. Typical kinetic trace for the reaction between 5×10^{-4} M $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^-$ and 0.05 M glycine, pH 6.0 (phosphate buffer) and 25.0 °C. The trace was fitted to a single exponential by following the decrease in absorbance at 390 nm. The lower trace represents the difference between the experimental and calculated curves.

Figure SI-3. Plot of k_{obs} versus [glycine] for the reaction between $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^-$ and glycine. Experimental conditions: $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^- = 5 \times 10^{-4}$ M, pH 6.0, 25.0 °C and $I = 0.1$ M (NaNO_3).

Figure SI-4. Plot of k_{obs} versus [cysteine] for the reaction between $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^-$ and cysteine. Experimental conditions: $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^- = 2.5 \times 10^{-4}$ M, pH 6.0, 25.0 °C and $I = 0.1$ M (NaNO_3).

Figure SI-5. Typical kinetic trace for the reaction between 2.5×10^{-4} M $[\text{Ru}(\text{edta})\text{H}_2\text{O}]^-$ and 0.02 M S-methylcysteine, pH 6.0 and 15.0 °C. The trace was fitted to one exponential by following the decrease in absorbance at 335 nm. The lower trace represents the difference between the experimental and calculated curves.

Figure SI-1

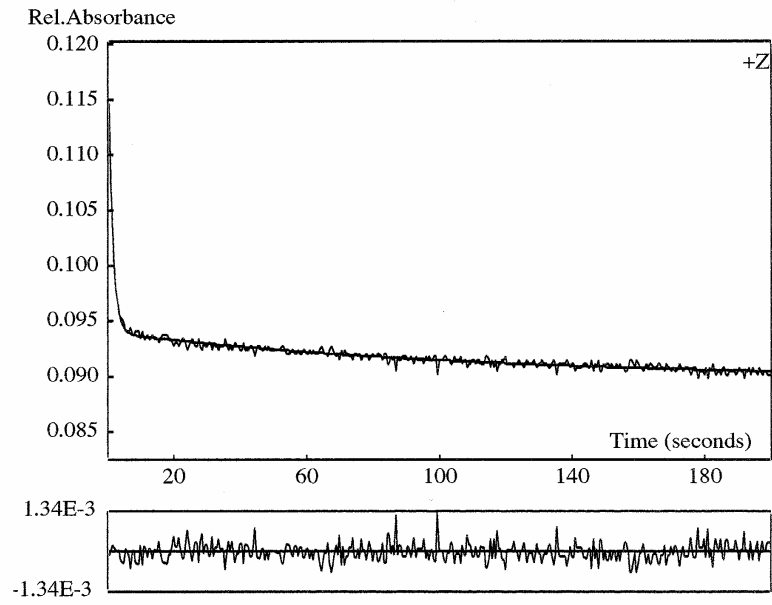


Figure SI-2

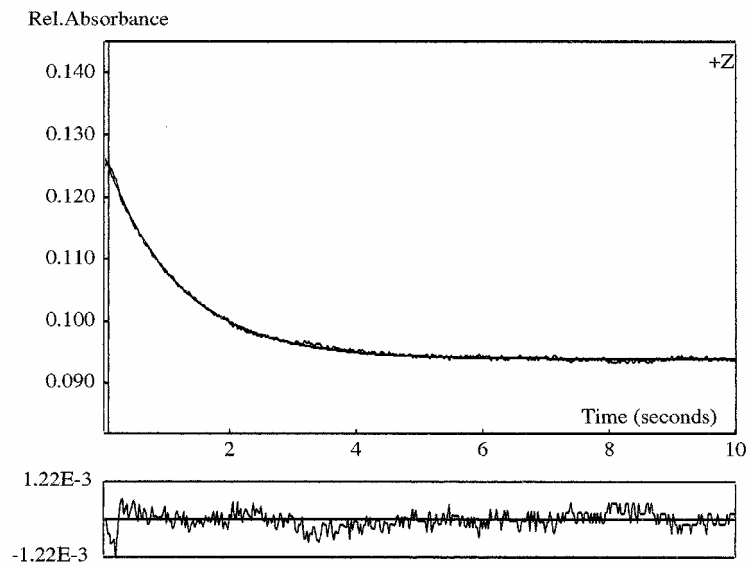


Figure SI-3

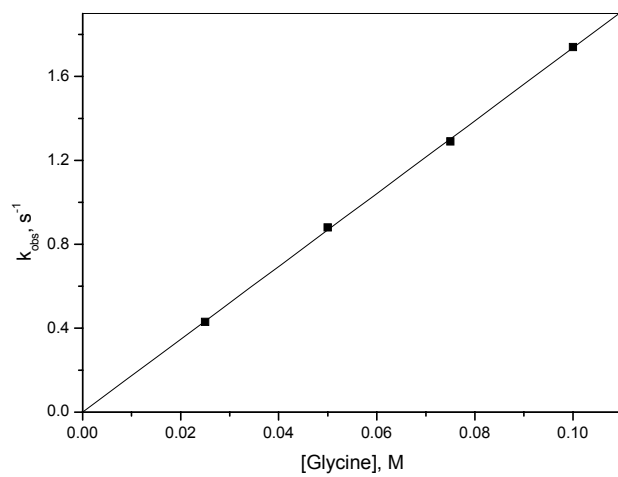


Figure SI-4

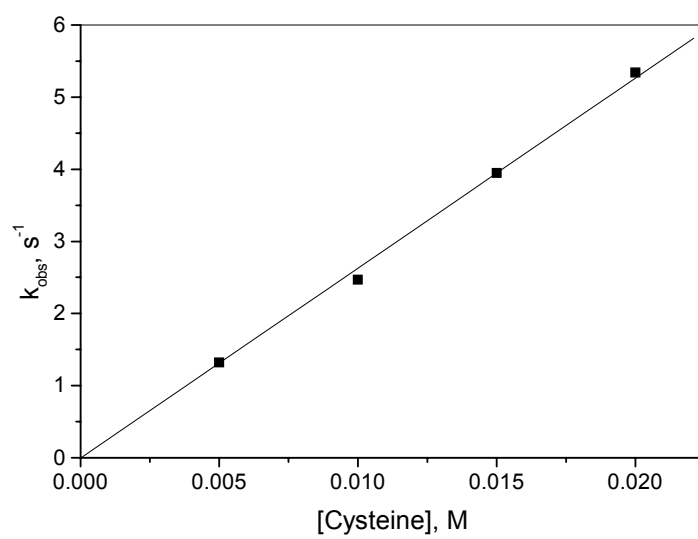


Figure SI-5

