Table S1. Table of MS Data for Platinated, Fluorescent Oligonucleotides.

Oligonucleotide	Calculated Mass	Determined Mass
Probe A top strand	5483	5485 ± 2
Probe B top strand	5474	5475 ± 2
Probe C top strand	5459	5461 ± 2
Probe D top strand	5483	5485 ± 2
Probe E top strand	5483	5484 ± 2
Probe F top strand	5483	5484 ± 2
Probe G top strand	5483	5484 ± 2

Table S2. Table of Platinum Atomic Absorption Data for Platinated Oligonucleotides with Fluorescein-dU at Position T5 and T12.

Oligonucleotide	Pt:Oligonucleotide Ratio[a]
Probe A top strand	1.22:1
Probe B top strand	1.04:1
Probe C top strand	1.16:1
Probe E top strand	0.96:1
Probe F top strand	0.7:1

[a]Deviations from values of 1.0 most likely reflect inaccuracies in the extinction coefficients used for the determination.

FIGURE LEGENDS

Figure S1. Diagram of the synthesis and purification of a platinated 71-mer DNA probe containing a fluorescein-modified deoxyuridine residue (fluorescein-dU). The location of the fluorescein-dU is denoted by U^{FL}, and the position of the cisplatin adduct is denoted by asterisks.

Figure S2. Results of stopped-flow competition experiments with 100% and 50% fluorescently labeled DNA. Panel A shows the results with 0.5 equiv of HMG1 domain A, and Panel B displays the results of experiments with 1 equiv of HMG1 domain A.

Figure S3. Gel mobility shift assays with HMG1 domain A. The results with a non-fluorescent 16-mer are shown in Panel A, and the gel with Probe A is presented in Panel B. Lanes 1-9 in both gels contain 1, 2, 5, 10, 20, 50, 100, 200, and 500 nM HMG1 domain A, respectively.

Figure S4. Stopped-flow results for HMG1 domain A binding to a platinated 71-mer probe with a fluorescein-dU. Panel A shows the fluorescence change that occurs upon mixing protein and DNA. Panel B plots the results of concentration-dependent studies that use eq. 1 to determine binding and dissociation rate constants.

Figure S5. Comparison of stopped-flow data with HMG1 domain A and the F37A mutant. Panel A displays a comparison of the fluorescence change for HMG1 domain A and the F37A mutant. Panel B highlights the small fluorescence change observed for the F37A mutant.

Figure S6. Comparison of stopped-flow data for HMG1 domain A and HMG1. The fluorescence change that occurs upon mixing protein and DNA is depicted.

Figure S7. Results of protein competition stopped-flow studies. Panel A depicts an example of the fluorescence change of the HMG1 domain A preformed complex with 1 or 10 equiv of HMG1 domain B or the F37A mutant. Panel B shows an example of the fluorescence change obtained with an HMG1 domain B or F37A mutant preformed complex with 1 and 10 equiv of HMG1 domain A.

Figure S8. Stopped-flow data of HMG1 domain A and a platinated 16-mer probe with the fluorescein-dU at position T12. The fluorescence change that occurs upon mixing protein and DNA is depicted.

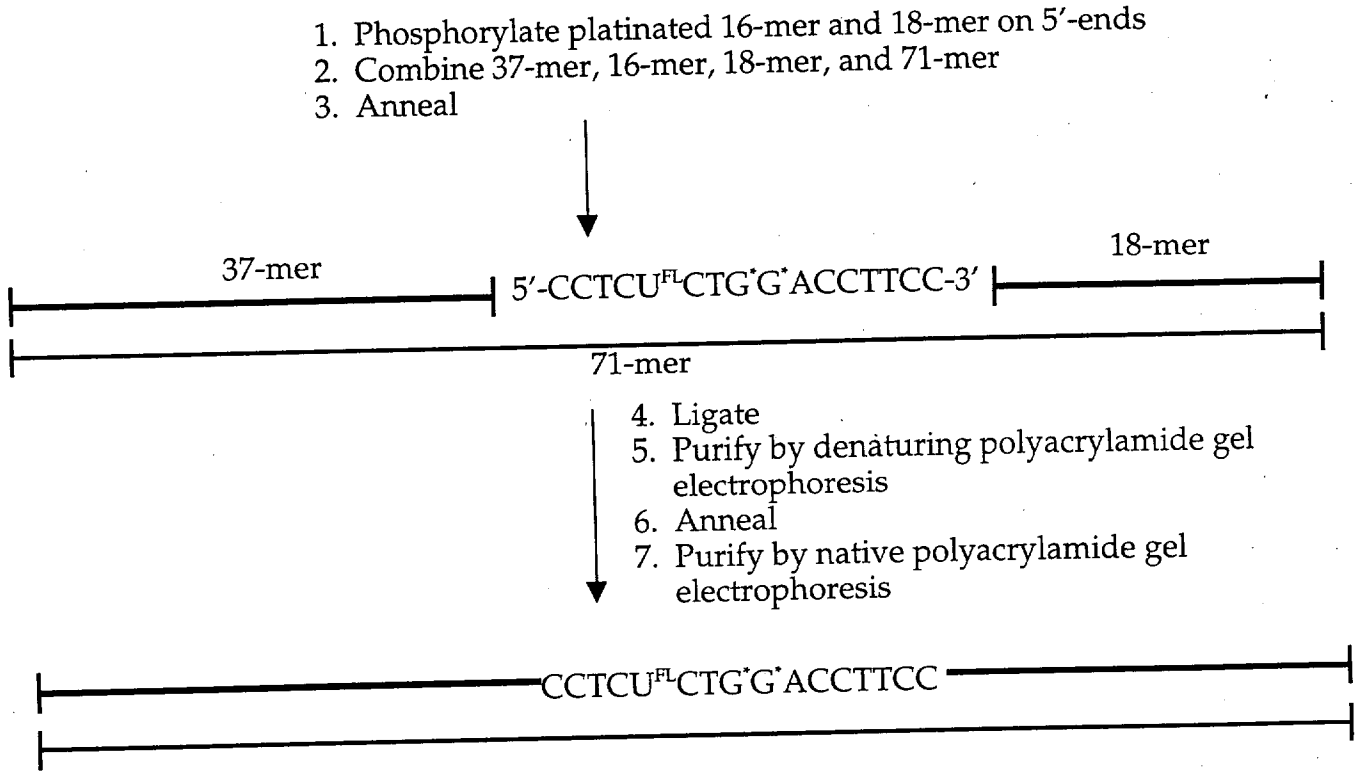

Figure S1. Jamieson and Lippard

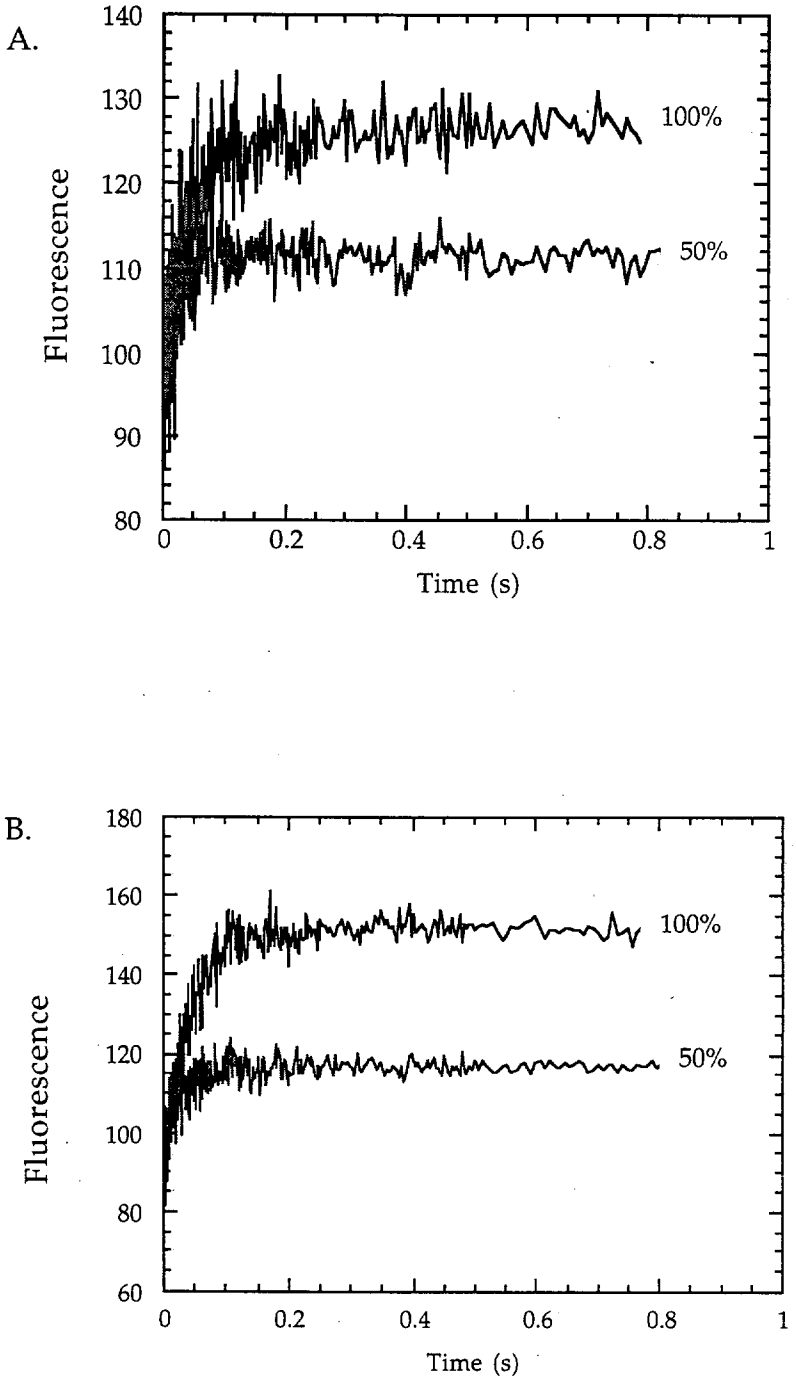

Figure S2. Jamieson and Lippard

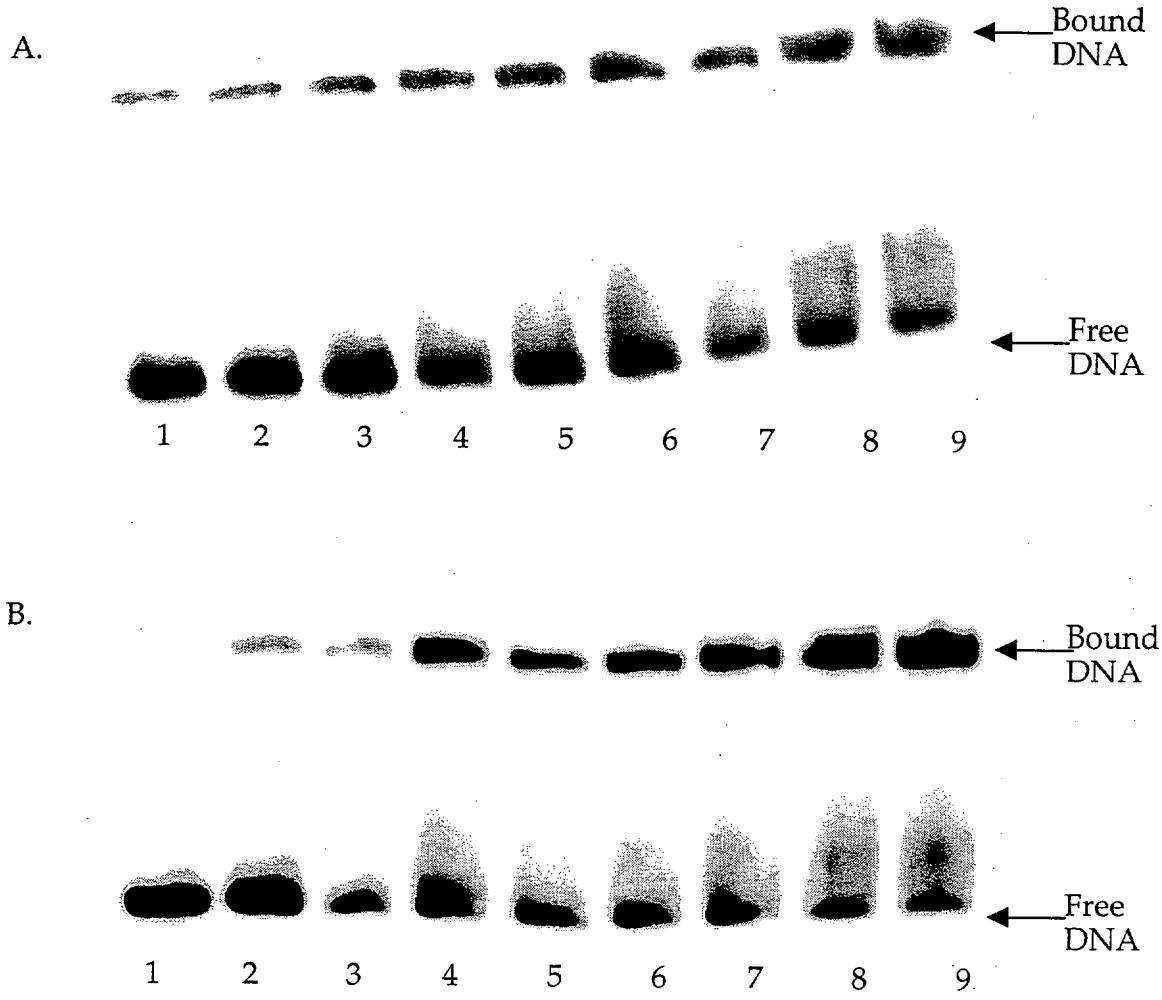

Figure S3. Jamieson and Lippard

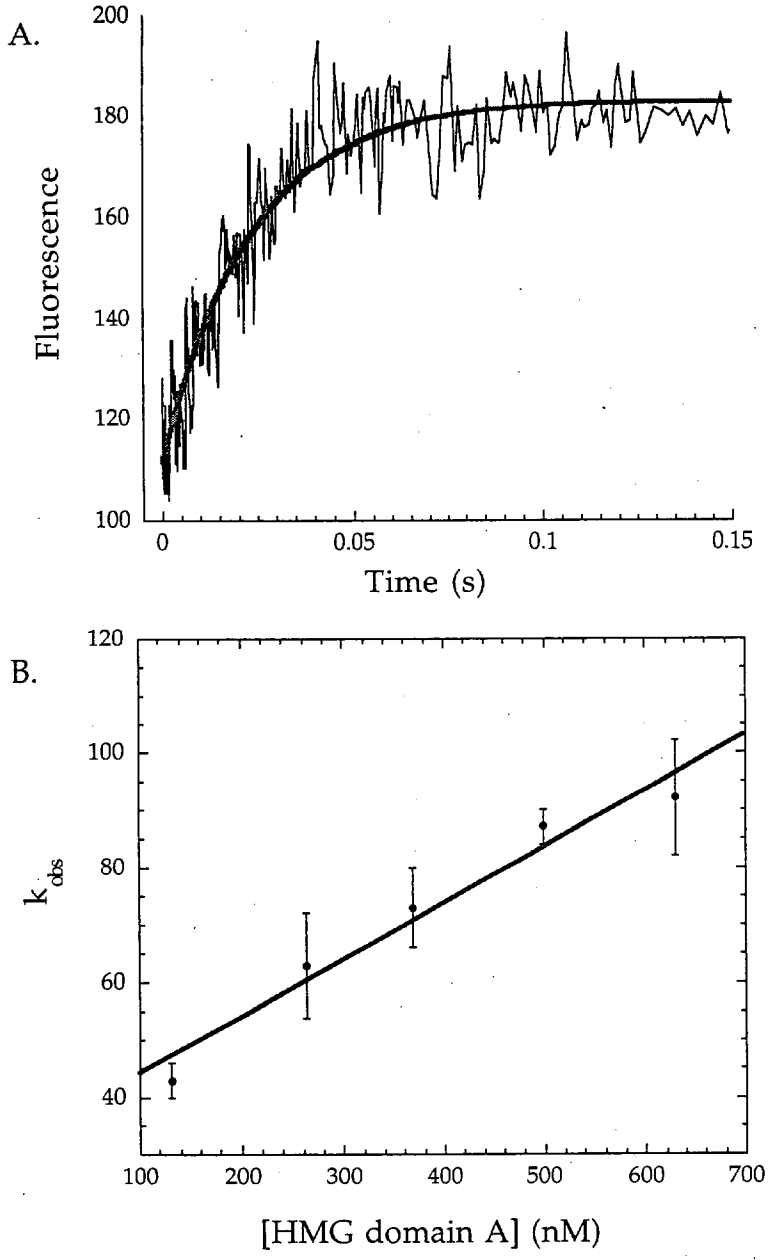

Figure S4. Jamieson and Lippard

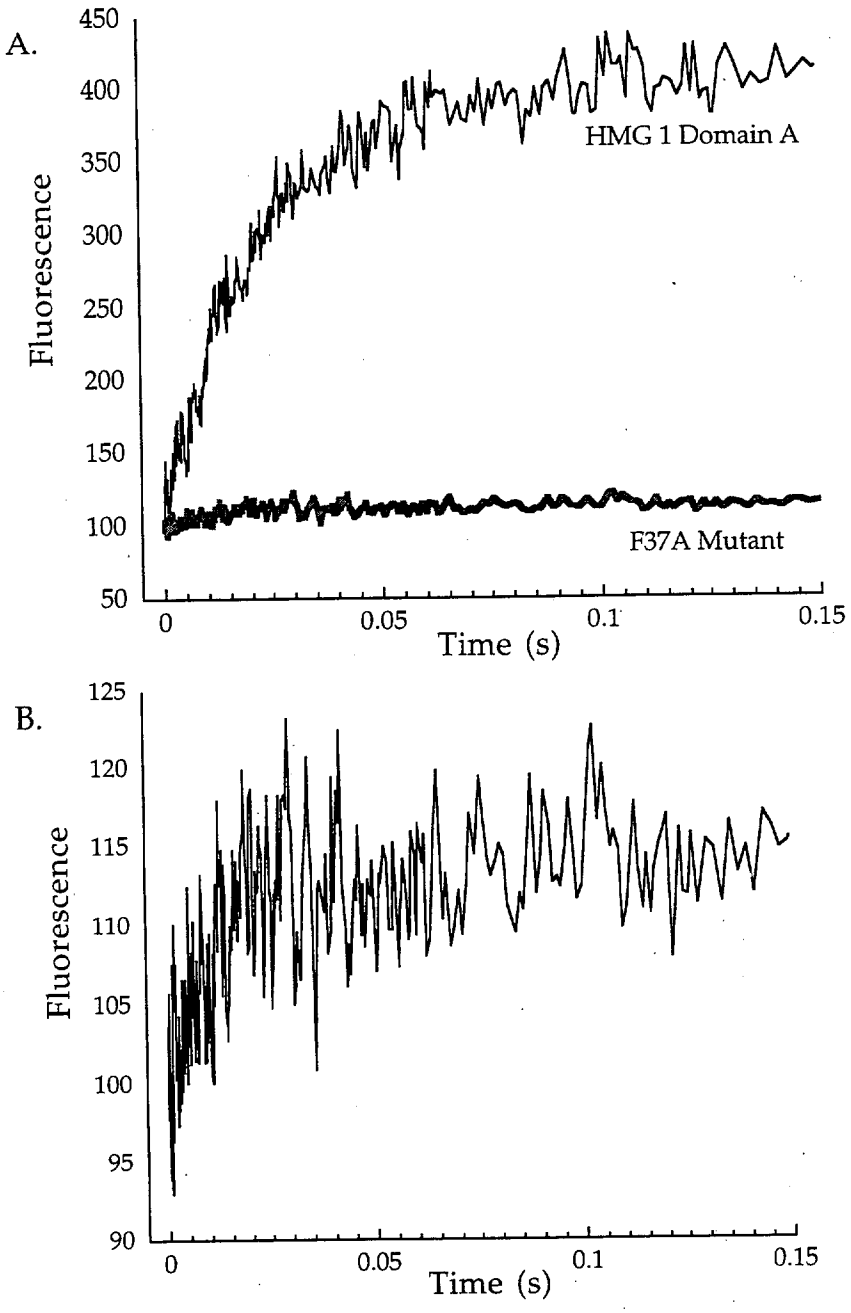

Figure S5. Jamieson and Lippard

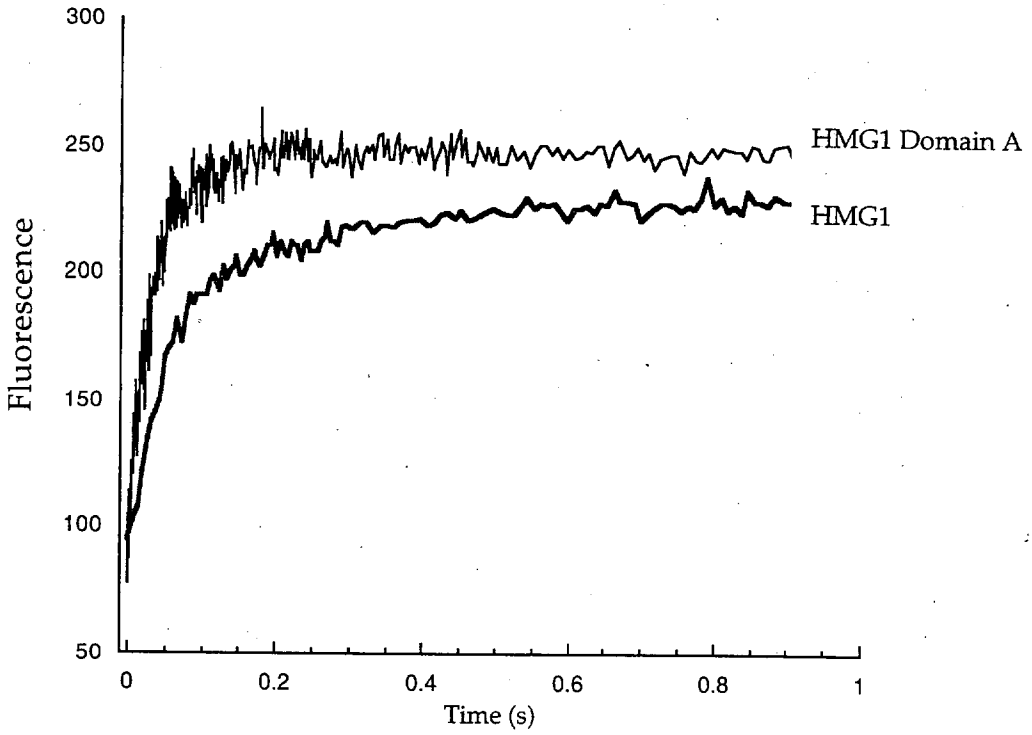

Figure S6. Jamieson and Lippard

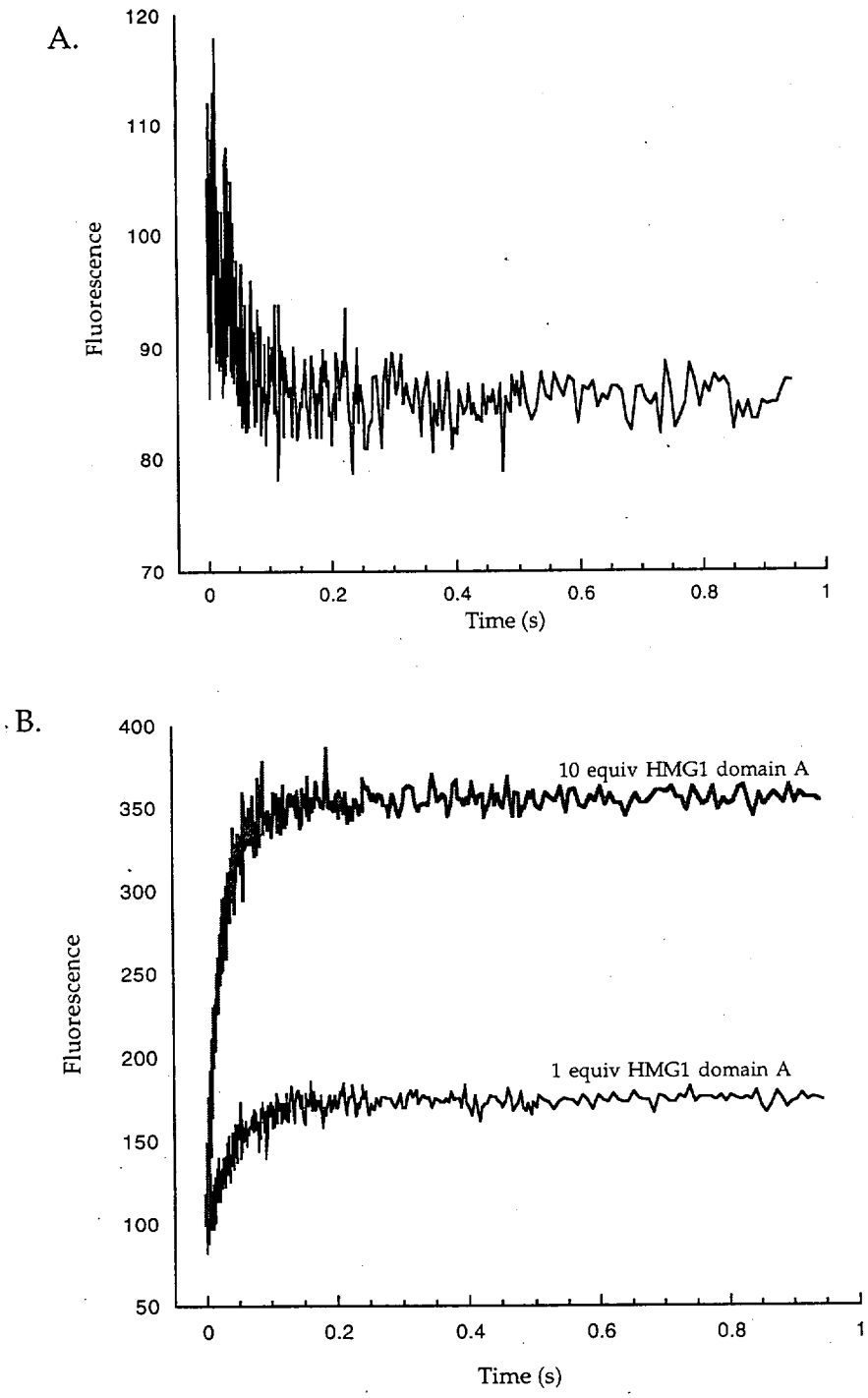

Figure S7. Jamieson and Lippard

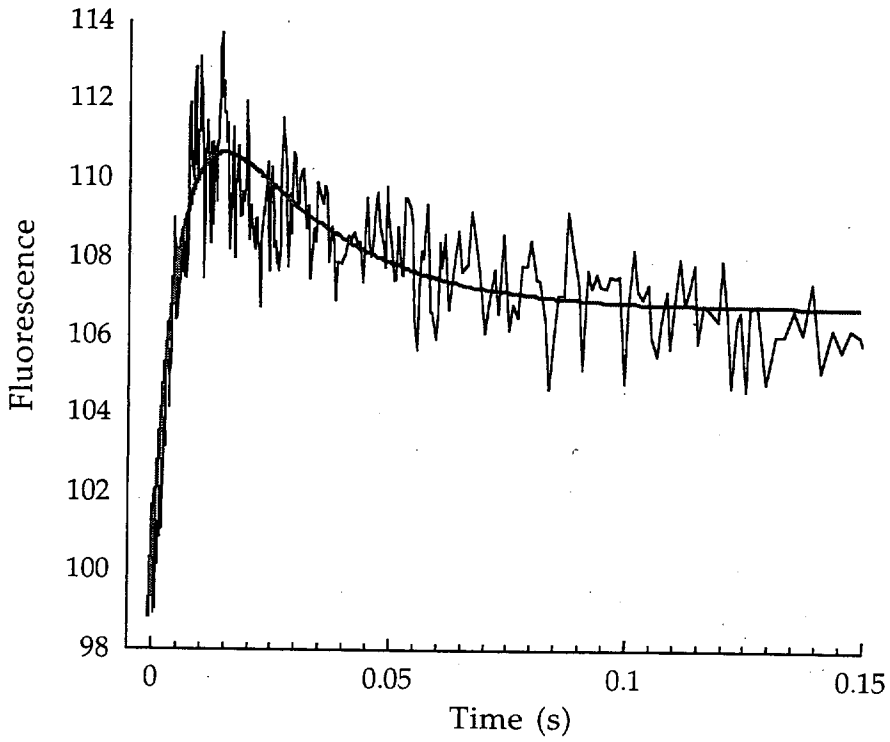

Figure S8. Jamieson and Lippard