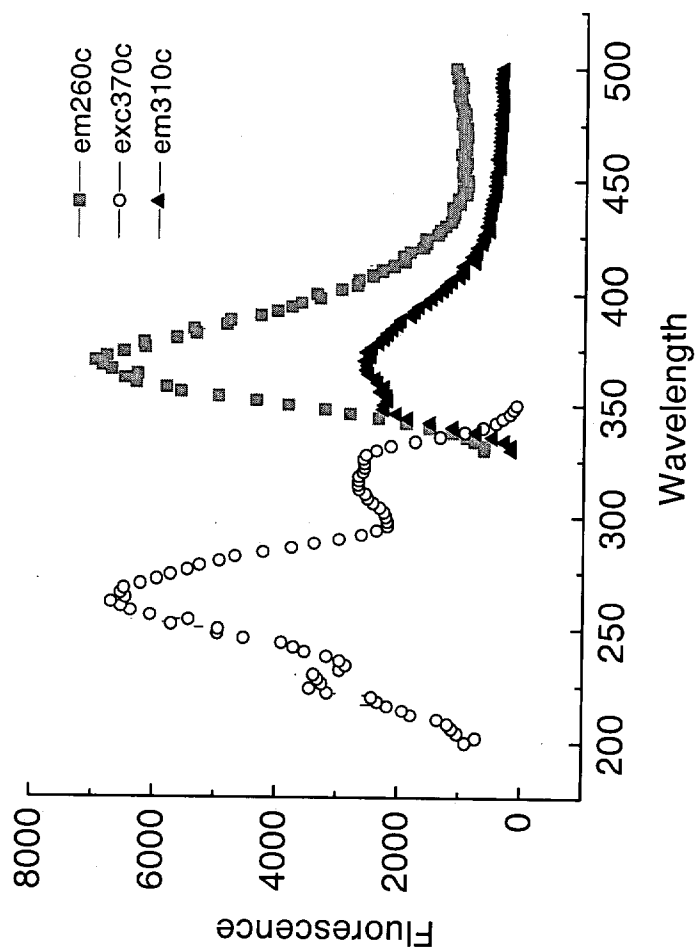


FIGURE LEGENDS – Supporting information

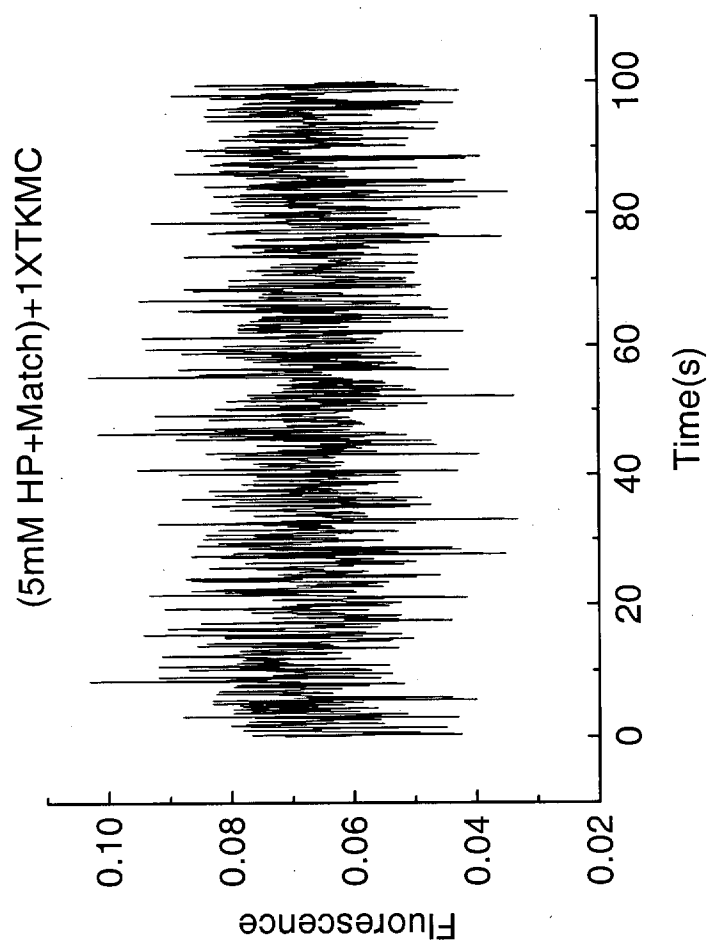
- Figure 1.** Excitation of 2-aminopurine duplexes at 260 nm provides larger signal.
(exc370c) Excitation spectrum of 2-AP containing duplex (2.5 μM) complexed with hairpin polyamide (2.5 μM) with emission monitored at 370 nm, (em260c) emission spectrum of same complex when irradiated at 260 nm, (em310c) emission spectrum of complex when irradiated at 310 nm.
- Figure 2.** Fluorescence of pre-equilibrated complex of 2.5 μM hairpin + 2.5 μM matched duplex mixed with 1X TKMC. No significant change in fluorescence is detected after as long as 100 s.
- Figure 3-5.** Representative stopped flow traces for dissociation of indicated polyamides from matched or single mismatch sites, monitored by mixing with 10 fold excess of 2-AP containing matched site. Excitation wavelength was 260 nm and emission was monitored using a 320 nm long-pass filter.



Supporting Information - Figure 1

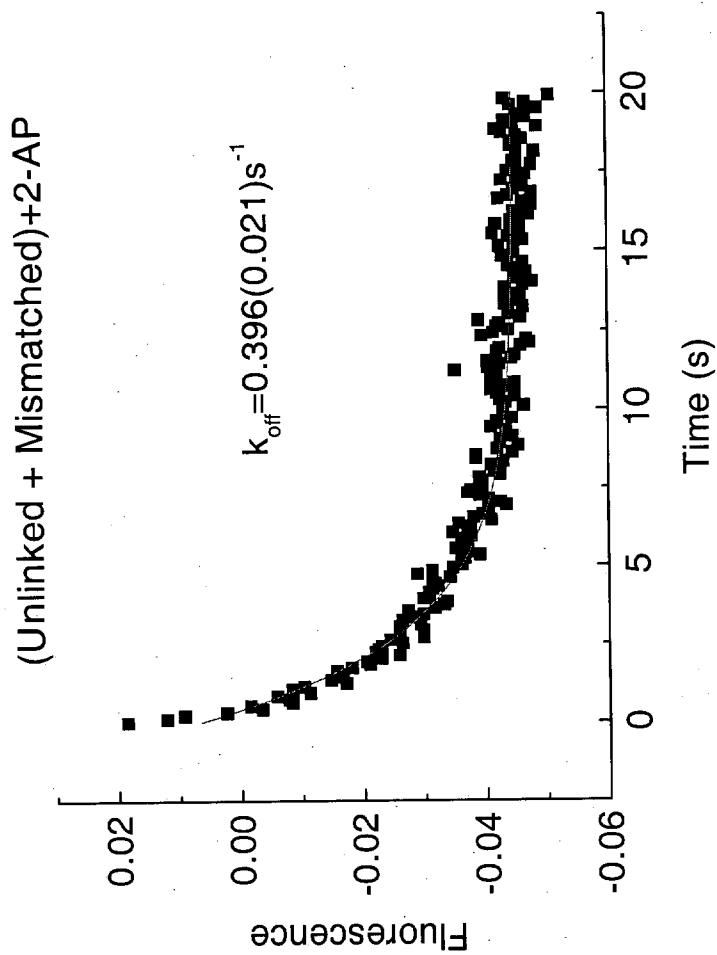


Supporting Information - Figure 2

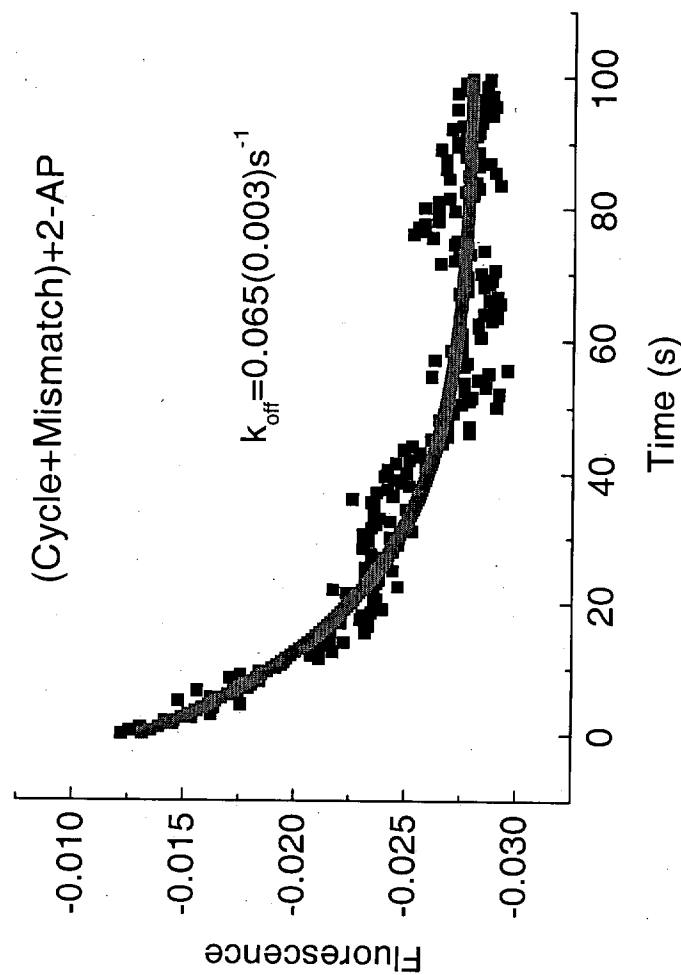
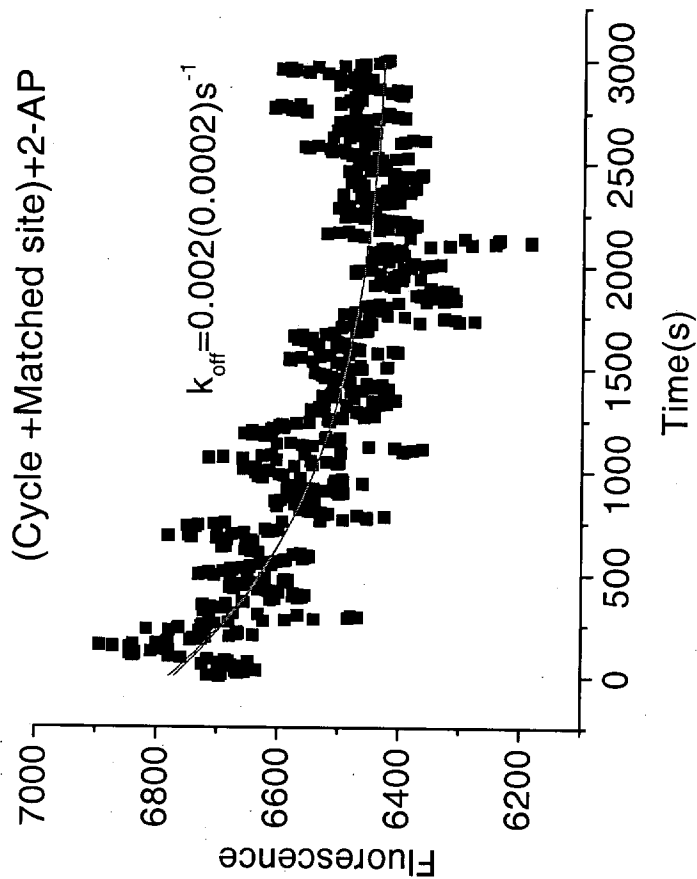


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Supporting Information - Figure 3



Supporting Information - Figure 4



Supporting Information - Figure 5

