

**Figure S4-** Fancm binding of DNA substrates as measured by fluorescence anisotropy-Binding reactions were performed as described under "Materials and Methods". The indicated concentrations of Fancm were incubated with 10 nM of the indicated substrate. Colored strand on each substrate represents the 5' fluorescent strand. Quantitative data from at least 3 experiments were plotted as the average for each protein concentration. Error bars represent the standard deviation about the mean. Oligonucleotides used to make these substrates can be found in Supporting material Table S1. Comparison of substrate bound between Fancm $\Delta$  on dsDNA ( $\blacksquare$ ) (56F/DS), ssDNA ( $\blacksquare$ )(56F); 25 bp duplex region with a 24 nt 5' overhang ( $\bullet$ )(56F/5OH); 25 bp duplex region with a 3' 24 nt 3' overhang ( $\bullet$ ) (56F/3OH).