# Supporting Information for: Conformation and Domain Movement Analysis of Human Matrix Metalloproteinase-2: role of associated $Zn^{2+}$ and $Ca^{2+}$ ions.

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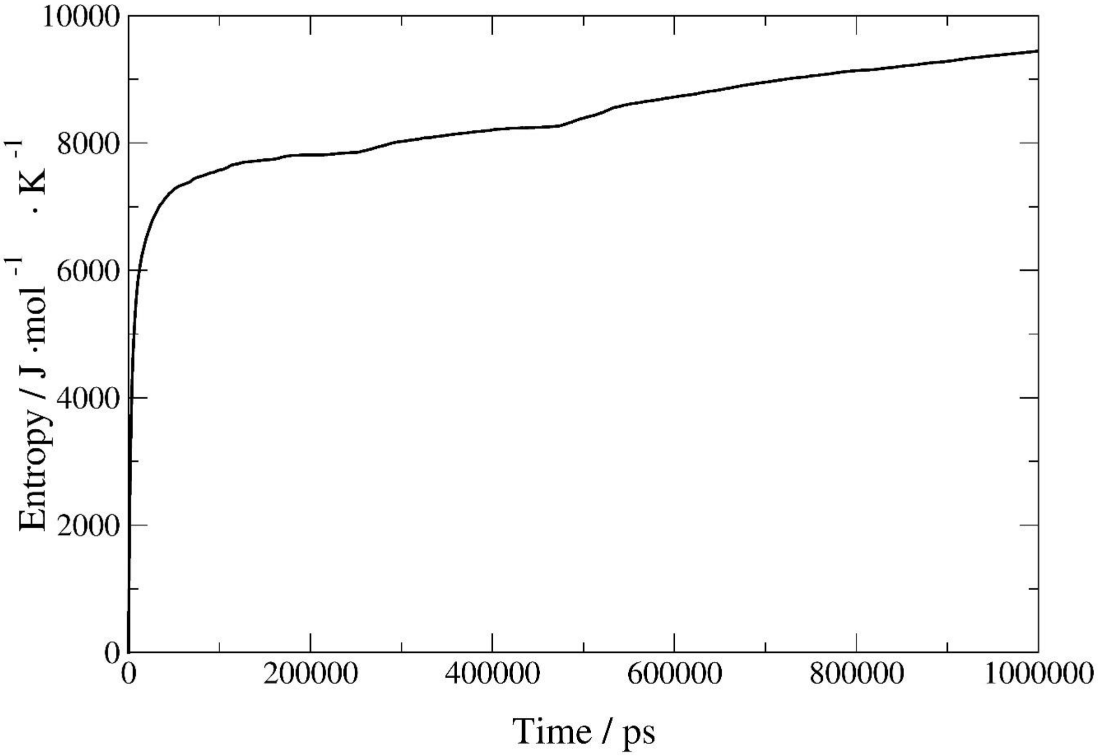

**Figure S1.** Configurational entropy of MMP-2 (calculated from the Cα-trace, $Zn^{2+}$ and $Ca^{2+}$ coordinates) as a function of time, demonstrating the 200000 ps necessary for system equilibration.

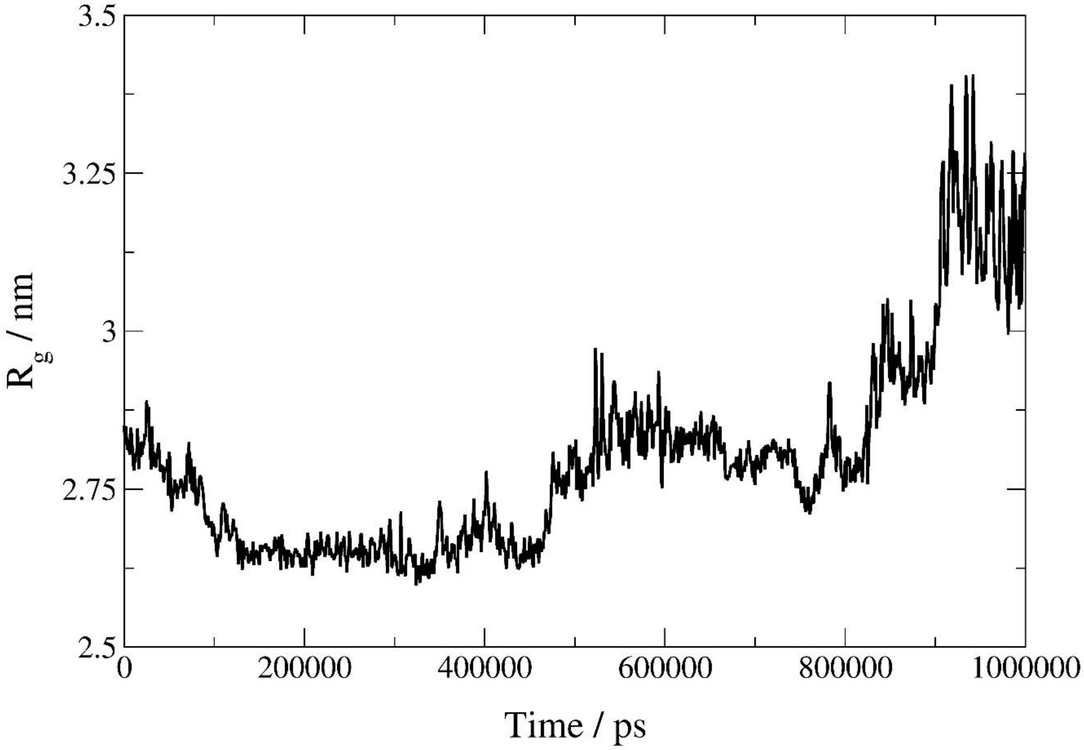

Figure S2. The radius of gyration ($R_g$) as a function of time.

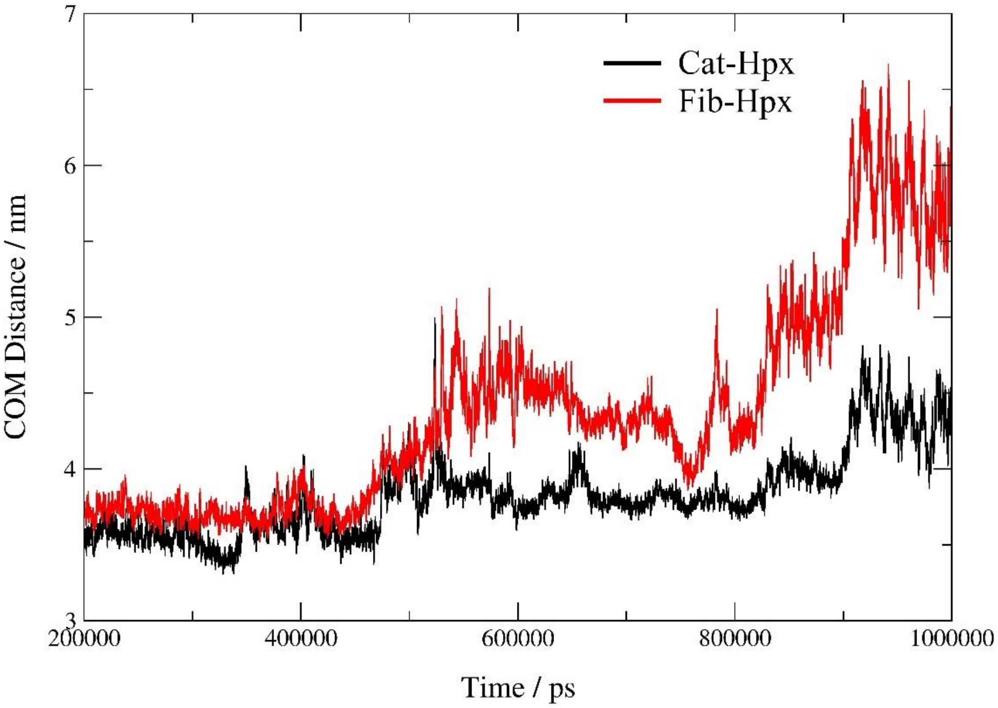

**Figure S3.** The Center of mass (COM) distance as a function of time between the Cat and Hpx (black) and Fib and Hpx (red) domains, respectively.

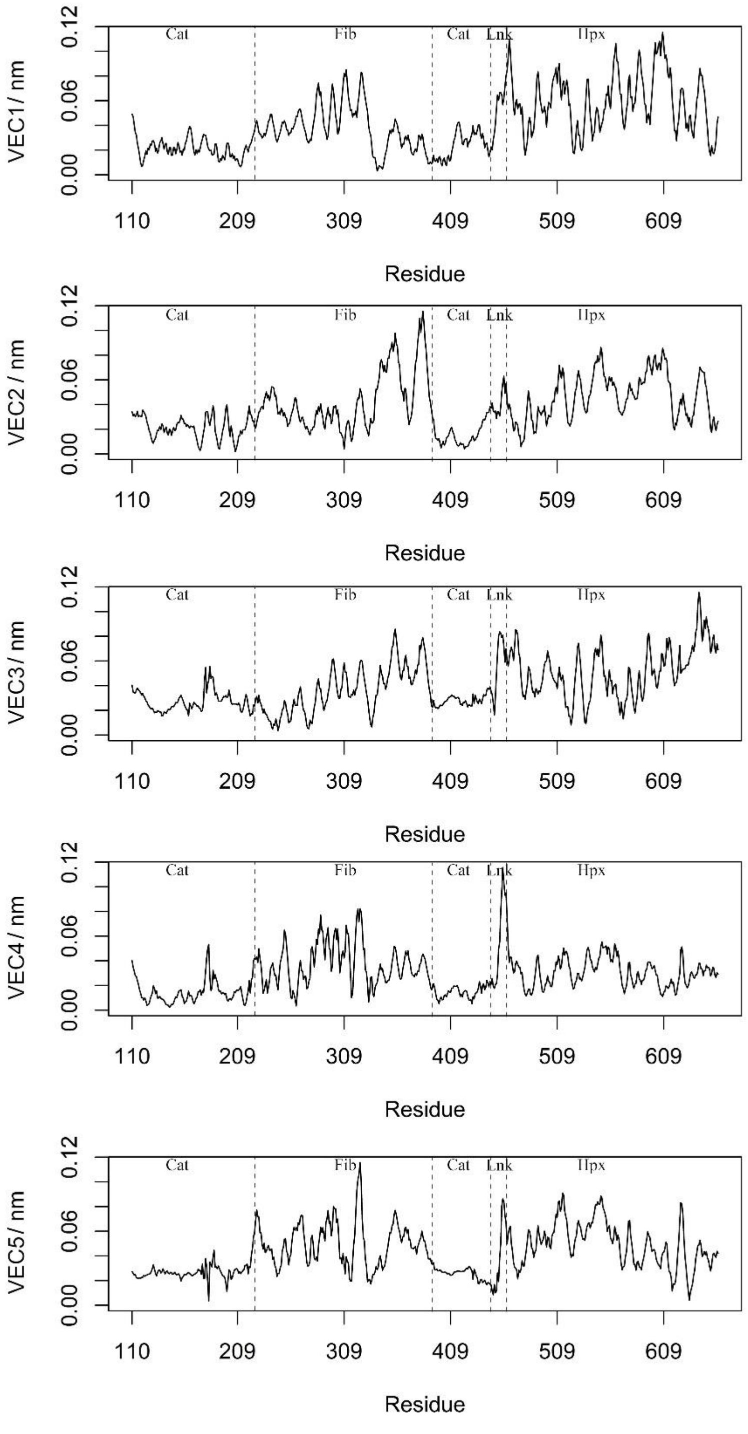

**Figure S4.** Cα-trace RMSF plots of the top 5 eigenvectors.