

**S3 Table.** P-value statistics testing the hypothesis that simulation metrics have the same distribution as the unmodified control simulations started from the same ZAP-70 crystal structure. Using the means of each simulation as the data.

Data are means of each simulation	K377-ubiq	K476-ubiq	K377-acet	K476-acet	K377-Ig domain
<b>Active state F349 C<math>\alpha</math> - D379 C<math>\beta</math> distance</b>	1.422x10 <sup>-10</sup>	0.1060	0.6744		0.1031
<b>Inactive state F349 C<math>\alpha</math> - D379 C<math>\beta</math> distance</b>	0.3394	3.124x10 <sup>-14</sup>		3.026x10 <sup>-4</sup>	
<b>Active state helicity</b>	2.219x10 <sup>-6</sup>	0.03266	5.277x10 <sup>-4</sup>		0.04564
<b>Inactive state helicity</b>	0.3463	0.1031		0.9098	
<b>Active state N348 C<math>\alpha</math> - W501 C<math>\alpha</math> distance</b>	7.084x10 <sup>-3</sup>	0.7338	0.5798		0.3673
<b>Inactive state N348 C<math>\alpha</math> - W501 C<math>\alpha</math> distance</b>	6.334x10 <sup>-11</sup>	1.081x10 <sup>-5</sup>		0.7138	