Table S1: **Distribution of the MD conformations into clusters.**

cluster no. →	1	2	3	4	5
NON_MUT	0.158	<u>0.556</u>	0.042	0.069	0.176
NON_MUT_PAR	<u>0.474</u>	0.341	0.133	0.045	0.007
G1491A	0.179	<u>0.327</u>	0.316	0.032	0.146
G1491A_PAR	0.044	0.106	0.299	<u>0.525</u>	0.027
G1491U	0.108	<u>0.354</u>	0.280	0.240	0.019
G1491U_PAR	<u>0.413</u>	0.204	0.023	0.183	0.177
U1495C	0.071	<u>0.515</u>	0.291	0.026	0.097
U1495C_PAR	0.120	0.149	<u>0.399</u>	0.222	0.110
U1406C/U1495A	0.244	<u>0.449</u>	0.148	0.073	0.086
U1406C/U1495A_PAR	0.289	0.028	0.066	0.166	<u>0.451</u>

Occupancy of each of the clusters derived from different MD simulations; the cluster with the highest population (occupancy) is underlined.