**S3 Table. RMSD based clustering of the N terminus region.** 3 sets of 500 Bayesian Markov model samples were subjected to RMSD based clustering of the NT conformation. The percentage populations of the three largest clusters are shown, the populations of these clusters in the most dominant MS in each condition are shown in bold. The numbers in parenthesis refer to cluster ids.

Largest cluster	D2R/WT	D2R/E <sup>2.65</sup> A	D3R/WT	D3R/E <sup>2.65</sup> A
1 <sup>st</sup>	18.1 ± 1.1	43.5 ± 2.4	18.3 ± 6.3	41.4 ± 8.9
	<b>17.6 ± 0.8</b>	69.9 ± 4.1	<b>21.5 ± 8.8</b>	35.2 ± 10.8
	(3)	(3)	(5)	(9)
2 <sup>nd</sup>	18.0 ± 3.5	11.4 ± 0.9	14.8 ± 1.0	11.7 ± 1.1
	<b>17.8 ± 5.8</b>	<b>2.6 ± 0.9</b>	<b>7.1 ± 1.1</b>	<b>13.7 ± 0.3</b>
	(5)	(6)	(18)	(1)
3 <sup>rd</sup>	17.7 ± 0.4	11.1 ± 1.3	8.9 ± 4.7	6.2 ± 5.8
	<b>0.8 ± 0.8</b>	<b>7.0 ± 1.9</b>	<b>7.3 ± 5.6</b>	<b>8.0 ± 7.7</b>
	(12)	(2)	(6)	(14)