

Supplementary Information for:

DNArCdb: A Database of Cancer Biomarkers in DNA Repair Genes that Includes Variants Related to Multiple Cancer Phenotypes

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TABLE S.1. p-values for SNPs from the breast cancer case-control study. Only SNPs with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs7116503	0.01	0.80	0.70	0.00
rs1528494	0.08	0.26	0.09	0.03
rs4754231	0.03	0.02	0.02	0.09
rs16952480	0.03	0.01	0.01	0.24
rs16952686	0.02	0.26	0.44	0.02
rs2302674	0.13	0.36	0.17	0.05
rs2388256	0.09	0.03	0.03	0.36
rs6499646	0.06	0.85	0.92	0.02
rs7205986	0.06	0.03	0.02	0.10
rs8047473	0.08	0.71	0.41	0.05
rs8062891	0.04	0.94	0.26	0.02
rs9924877	0.01	0.12	0.87	0.04
rs2066992	0.05	0.05	0.04	0.10
rs2069837	0.03	0.26	0.52	0.03
rs1997605	0.04	0.52	0.21	0.01
rs10075024	0.02	0.01	0.01	0.12
rs6151838	0.02	0.00	0.00	0.27
rs256575	0.09	0.60	0.83	0.04
rs5743030	0.07	0.03	0.04	0.57
rs10161263	0.06	0.03	0.12	0.87
rs3219495	0.02	0.41	1.00	0.10
rs804267	0.04	0.38	0.06	0.01
rs804256	0.02	0.01	0.03	0.59
rs2048075	0.08	0.29	0.05	0.03
rs1055678	0.00	0.59	0.20	0.00
rs6743106	0.01	0.04	0.13	0.04
rs6715340	0.02	0.05	0.12	0.10

rs10911390	0.09	0.03	0.03	0.57
rs12221107	0.03	0.04	0.09	0.20
rs12241767	0.02	0.02	0.06	0.40
rs1805410	0.07	0.42	0.15	0.02

TABLE S.2. p-values for SNPs from the prostate cancer case-control study. Only SNPS with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs7160307	0.01	0.04	0.01	0.01
rs7540	0.09	0.03	0.04	0.91
rs12447481	0.05	0.12	0.06	0.03
rs3751812	0.04	0.11	0.02	0.02
rs6499653	0.03	0.01	0.01	0.18
rs7190492	0.11	0.05	0.04	0.15
rs7193938	0.06	0.02	0.04	0.97
rs8044769	0.05	0.01	0.03	0.29
rs8050136	0.05	0.12	0.02	0.02
rs9302652	0.09	0.03	0.03	0.26
rs175057	0.03	0.60	0.06	0.01
rs10495944	0.13	0.47	0.23	0.05
rs10514805	0.08	0.03	0.02	0.26
rs2042649	0.07	0.33	0.17	0.03
rs4608577	0.07	0.49	0.18	0.02
rs4952887	0.07	0.96	0.61	0.02
rs32985	0.09	0.07	0.03	0.08
rs3776967	0.10	0.68	0.18	0.03
rs13112390	0.00	0.02	0.19	0.07
rs13112358	0.00	0.00	0.02	0.72
rs2048075	0.08	0.03	0.04	0.26
rs2048074	0.00	0.00	0.02	0.72
rs293796	0.00	0.00	0.00	0.57
rs293784	0.11	0.04	0.04	0.39
rs125701	0.08	0.04	0.03	0.19
rs3093872	0.11	0.95	0.89	0.04

TABLE S.3. p-values for SNPs from the lung cancer case-control study. Only SNPS with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs7160307	0.05	0.07	0.07	0.07
rs11037720	0.03	0.01	0.01	0.01
rs7101434	0.05	0.01	0.01	0.01
rs1528494	0.10	0.02	0.02	0.02
rs1789162	0.04	0.03	0.03	0.03
rs1950031	0.00	0.00	0.00	0.00
rs645056	0.04	0.14	0.14	0.14
rs650218	0.03	0.00	0.00	0.00
rs1077340	0.00	0.00	0.00	0.00
rs1075440	0.02	0.29	0.29	0.29
rs11075996	0.00	0.24	0.24	0.24
rs11075997	0.00	0.24	0.24	0.24
rs12597786	0.01	0.19	0.19	0.19
rs16953002	0.00	0.24	0.24	0.24
rs16953047	0.19	0.05	0.05	0.05
rs17219084	0.04	0.14	0.14	0.14
rs17819033	0.00	0.00	0.00	0.00
rs1861868	0.03	0.04	0.04	0.04
rs4784335	0.00	0.00	0.00	0.00
rs4784351	0.02	0.27	0.82	0.03
rs6499646	0.00	0.02	0.02	0.02
rs708262	0.00	0.00	0.00	0.00
rs7188162	0.02	0.00	0.00	0.00
rs7193851	0.00	0.00	0.00	0.00
rs7200972	0.00	0.00	0.00	0.00
rs8061239	0.06	0.04	0.04	0.04
rs9302652	0.01	0.23	0.23	0.23
rs9924877	0.08	0.04	0.20	0.80
rs9931164	0.02	0.01	0.01	0.01
rs9937234	0.13	0.04	0.04	0.04
rs16478	0.17	0.04	0.04	0.04
rs6536991	0.09	0.01	0.01	0.01
rs184967	0.00	0.19	0.19	0.19
rs245340	0.00	0.14	0.14	0.14
rs245359	0.00	0.82	0.82	0.82
rs245403	0.01	0.04	0.04	0.04
rs245408	0.01	0.08	0.08	0.08
rs249633	0.03	0.08	0.08	0.08

rs26279	0.00	0.47	0.47	0.47
rs32951	0.04	0.15	0.15	0.15
rs32989	0.00	0.75	0.75	0.75
rs33010	0.00	0.09	0.42	0.03
rs397628	0.00	0.01	0.01	0.01
rs6151616	0.01	0.04	0.04	0.04
rs6151653	0.01	0.17	0.17	0.17
rs6151662	0.15	0.02	0.02	0.02
rs6874652	0.04	0.24	0.24	0.24
rs836794	0.03	0.08	0.08	0.08
rs863214	0.02	0.04	0.04	0.04
rs1800936	0.16	0.03	0.03	0.03
rs1233287	0.00	0.00	0.00	0.00
rs17806132	0.01	0.00	0.00	0.00
rs256554	0.00	0.00	0.00	0.00
rs256575	0.09	0.04	0.04	0.04
rs12112229	0.02	0.98	0.98	0.98
rs12534423	0.03	0.57	0.57	0.57
rs3789940	0.03	0.29	0.29	0.29
rs3767300	0.00	0.00	0.00	0.00
rs11573534	0.00	0.89	0.61	0.36
rs11573525	0.00	0.08	0.08	0.08
rs11573504	0.00	0.16	0.16	0.16
rs11573480	0.00	0.37	0.37	0.37
rs11573379	0.06	0.02	0.02	0.02
rs11573344	0.00	0.00	0.00	0.42
rs6629916	0.00	0.00	0.00	0.09
rs6526404	0.00	0.07	0.07	0.07
rs5944697	0.00	0.06	0.06	0.06
rs5944690	0.00	0.01	0.01	0.01
rs5943997	0.00	0.19	0.19	0.19
rs4898197	0.00	0.66	0.66	0.66
rs4273981	0.00	0.30	0.30	0.30
rs4258157	0.02	0.66	0.66	0.66
rs3764770	0.01	0.92	0.92	0.92
rs1858783	0.02	0.29	0.29	0.29
rs673147	0.02	0.19	0.19	0.19
rs667341	0.01	0.05	0.05	0.05
rs2979896	0.09	1.00	0.61	0.03
rs3219337	0.00	0.00	0.00	0.00
rs10219203	0.00	0.00	0.00	0.00

rs4944925	0.05	0.75	0.75	0.75
rs4145953	0.03	0.64	0.64	0.64
rs3824999	0.20	0.04	0.04	0.04
rs5744807	0.04	0.38	0.38	0.38
rs9671528	0.11	0.05	0.05	0.05
rs3218801	0.00	0.00	0.00	0.00
rs3810925	0.03	0.07	0.07	0.07
rs14419	0.00	0.00	0.00	0.00
rs2307449	0.01	0.24	0.24	0.24
rs694498	0.03	0.18	0.18	0.18
rs5744680	0.00	0.00	0.00	0.00
rs7778745	0.02	0.57	0.57	0.57
rs17132385	0.02	0.06	0.06	0.06
rs7660498	0.13	0.04	0.04	0.04
rs472972	0.00	0.04	0.04	0.04
rs3806614	0.06	0.04	0.04	0.04
rs3218647	0.02	0.02	0.02	0.02
rs3792135	0.00	0.00	0.00	0.00
rs3087395	0.03	0.00	0.00	0.00
rs1451245	0.19	0.04	0.04	0.04
rs11751625	0.00	0.00	0.00	0.00
rs9398269	0.00	0.00	0.00	0.00
rs4945880	0.10	0.02	0.02	0.02
rs462779	0.09	0.02	0.02	0.02
rs240993	0.05	0.02	0.02	0.02
rs240972	0.14	0.04	0.04	0.04
rs240968	0.02	0.00	0.00	0.00
rs12221107	0.00	0.00	0.00	0.00
rs16925541	0.05	0.41	0.41	0.41
rs139298	0.08	0.02	0.02	0.02
rs8177832	0.13	0.02	0.02	0.02
rs13415763	0.01	0.05	0.05	0.05
rs7419739	0.07	0.01	0.01	0.01
rs3138353	0.03	0.09	0.09	0.09
rs3219487	0.06	0.02	0.02	0.02
rs6982453	0.10	0.03	0.06	0.37
rs4840583	0.00	0.01	0.01	0.01
rs804256	0.01	0.01	0.01	0.01
rs17064661	0.06	0.04	0.04	0.04
rs13112358	0.08	0.01	0.01	0.01
rs12501016	0.15	0.02	0.02	0.02

rs6830266	0.05	0.05	0.05	0.05
rs867612	0.03	0.01	0.01	0.01
rs6809452	0.04	0.04	0.04	0.04
rs125701	0.04	0.01	0.01	0.01
rs2027440	0.02	0.66	0.66	0.66
rs1805411	0.00	0.07	0.07	0.07
rs1136410	0.01	0.19	0.19	0.19
rs10861152	0.10	0.02	0.02	0.02
rs4135126	0.00	0.00	0.00	0.00
rs4135106	0.07	0.05	0.05	0.05
rs4135042	0.07	0.01	0.01	0.01
rs1866074	0.15	0.02	0.02	0.02
rs3219243	0.05	0.01	0.01	0.01
rs2854501	0.01	0.17	0.17	0.17

TABLE S.4. p-values for SNPs from the pancreatic cancer case-control study. Only SNPs with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs7116503	0.06	0.02	0.02	0.26
rs10890735	0.08	0.04	0.13	0.72
rs654093	0.12	0.25	0.06	0.05
rs682334	0.07	0.18	0.03	0.03
rs1008400	0.02	0.14	0.01	0.01
rs10492872	0.01	0.04	0.01	0.01
rs10521306	0.07	0.02	0.02	0.24
rs1071501	0.03	0.01	0.01	0.58
rs1075440	0.08	0.08	0.03	0.06
rs10852521	0.05	0.03	0.02	0.07
rs1344503	0.06	0.09	0.04	0.04
rs16952686	0.08	0.98	0.68	0.03
rs16953047	0.01	0.00	0.01	0.74
rs17224310	0.05	0.10	0.04	0.03
rs2302674	0.09	0.08	0.04	0.09
rs2540766	0.06	0.74	0.91	0.03
rs2665274	0.03	0.06	0.02	0.02
rs2689264	0.01	0.00	0.01	0.55
rs3751812	0.02	0.15	0.01	0.00
rs708262	0.04	0.01	0.01	0.16
rs7190492	0.12	0.05	0.04	0.23
rs7195994	0.02	0.06	0.02	0.02
rs7199185	0.01	0.22	0.55	0.01
rs7206456	0.01	0.45	0.59	0.01
rs8044769	0.05	0.02	0.02	0.17
rs8050136	0.02	0.12	0.01	0.00
rs9930333	0.07	0.25	0.04	0.02
rs9941349	0.04	0.28	0.04	0.01
rs16129	0.12	0.20	0.05	0.05
rs16478	0.14	0.07	0.05	0.19
rs17349	0.02	0.19	0.06	0.01
rs6536991	0.07	0.87	0.31	0.03
rs10514805	0.04	0.01	0.01	0.71
rs4952887	0.04	0.01	0.01	0.60
rs12112229	0.03	0.70	0.52	0.02
rs2286680	0.03	0.81	0.32	0.01
rs11573480	0.05	0.02	0.01	0.03
rs6526404	0.09	0.05	0.03	0.06

rs5944697	0.04	0.02	0.01	0.05
rs4898197	0.13	0.40	0.14	0.05
rs4273981	0.08	0.03	0.02	0.07
rs3764770	0.11	0.04	0.04	0.10
rs2307449	0.00	0.00	0.00	0.01
rs2247233	0.01	0.01	0.00	0.02
rs976072	0.00	0.01	0.00	0.01
rs13141668	0.07	0.59	0.84	0.04
rs16832303	0.01	0.33	0.09	0.00
rs3218651	0.04	0.30	0.08	0.01
rs1174657	0.05	0.16	0.03	0.02
rs1174658	0.05	0.16	0.03	0.02
rs6546418	0.09	0.07	0.04	0.09
rs3138353	0.11	0.04	0.08	0.96
rs140693	0.06	0.02	0.02	0.36
rs17754589	0.08	0.41	0.14	0.02
rs8191649	0.04	0.94	0.36	0.01
rs12645561	0.08	0.03	0.05	0.94
rs6850861	0.05	0.04	0.11	0.38
rs6834946	0.08	0.04	0.07	0.66
rs3805169	0.07	0.02	0.02	0.58
rs1876268	0.02	0.07	0.11	0.04
rs1055678	0.11	0.56	0.28	0.04
rs3093921	0.04	0.21	0.13	0.02
rs4135064	0.12	0.04	0.06	0.98
rs1866074	0.05	0.10	0.02	0.02

TABLE S.5. p-values for SNPs from the chronic lymphocytic leukemia case-control study. Only SNPS with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs10521307	0.11	0.04	0.04	0.29
rs1075440	0.03	0.02	0.01	0.06
rs10852523	0.02	0.01	0.01	0.07
rs11075994	0.02	0.08	0.01	0.01
rs11075996	0.02	0.01	0.01	0.07
rs11075997	0.02	0.01	0.01	0.07
rs11642841	0.02	0.29	0.71	0.03
rs12324955	0.02	0.01	0.07	0.61
rs12799548	0.11	0.05	0.04	0.24
rs12806569	0.10	0.39	0.15	0.03
rs1474347	0.08	0.03	0.12	0.83
rs1554316	0.10	0.34	0.12	0.03
rs1554606	0.12	0.04	0.10	0.61
rs16131	0.13	0.49	0.23	0.04
rs16139	0.11	0.63	0.82	0.05
rs17219084	0.03	0.01	0.01	0.13
rs17818824	0.07	0.02	0.02	0.31
rs17819033	0.06	0.02	0.02	0.20
rs17823199	0.06	0.02	0.12	0.85
rs17825554	0.02	0.03	0.05	0.16
rs1861868	0.07	0.03	0.19	0.92
rs2069832	0.13	0.05	0.15	0.83
rs2111115	0.01	0.07	0.00	0.00
rs2665275	0.05	0.02	0.01	0.22
rs6499652	0.01	0.06	0.00	0.00
rs6499662	0.10	0.08	0.03	0.09
rs654093	0.02	0.01	0.07	0.92
rs667741	0.01	0.01	0.07	0.95
rs682334	0.03	0.01	0.08	0.93
rs7185783	0.03	0.15	0.45	0.08
rs7192835	0.01	0.16	0.49	0.02
rs7203572	0.05	0.02	0.02	0.16
rs7205009	0.00	0.05	0.00	0.00
rs8056199	0.05	0.02	0.02	0.16
rs9921255	0.00	0.02	0.19	0.07
rs139297	0.01	0.02	0.00	0.01
rs3998860	0.03	0.36	0.09	0.01
rs5757465	0.05	0.59	0.09	0.02

rs10235277	0.09	0.04	0.08	0.95
rs12534423	0.09	0.03	0.03	0.42
rs2035256	0.06	0.02	0.05	0.55
rs3136247	0.03	0.01	0.03	0.95
rs4608577	0.05	0.54	0.92	0.04
rs5742959	0.08	0.36	0.50	0.05
rs6151599	0.14	0.06	0.05	0.30
rs6151735	0.13	0.06	0.05	0.30
rs6151826	0.06	0.33	0.20	0.02
rs1055362	0.05	0.64	0.58	0.03
rs10870483	0.01	0.25	0.02	0.00
rs11094975	0.01	0.42	0.79	0.09
rs11573504	0.00	0.04	0.33	0.39
rs11573534	0.05	0.68	0.66	0.10
rs11709726	0.03	0.79	0.13	0.01
rs12761715	0.08	0.04	0.07	0.73
rs13402784	0.04	0.56	0.87	0.03
rs1381058	0.02	0.75	0.11	0.01
rs14302	0.01	0.27	0.02	0.00
rs1549067	0.05	0.51	0.72	0.04
rs1893362	0.13	0.04	0.05	0.42
rs2030531	0.03	0.78	0.14	0.01
rs3087370	0.00	0.00	0.02	0.82
rs3135056	0.11	0.40	0.21	0.04
rs3218642	0.07	0.03	0.04	0.74
rs3730476	0.04	0.52	0.67	0.03
rs3767300	0.01	0.21	0.01	0.00
rs3789940	0.01	0.01	0.01	0.06
rs4883536	0.05	0.05	0.02	0.06
rs4883537	0.06	0.04	0.02	0.06
rs4883543	0.07	0.05	0.02	0.09
rs4883544	0.02	0.25	0.02	0.00
rs4898197	0.00	0.05	0.41	0.41
rs4898297	0.00	0.18	0.72	0.04
rs4898299	0.00	0.13	0.78	0.03
rs4944926	0.13	0.05	0.04	0.27
rs5744707	0.09	0.18	0.09	0.05
rs5744844	0.07	0.05	0.02	0.07
rs5744857	0.08	0.06	0.02	0.07
rs5744944	0.07	0.05	0.02	0.08
rs5943997	0.02	0.26	0.97	0.21

rs5944671	0.00	0.20	0.57	0.02
rs5944688	0.00	0.06	0.47	0.38
rs5944689	0.00	0.05	0.83	0.08
rs5944695	0.00	0.08	0.59	0.25
rs5944697	0.00	0.07	0.55	0.29
rs5944708	0.00	0.11	0.81	0.19
rs6526404	0.01	0.48	0.09	0.00
rs7110993	0.14	0.06	0.05	0.26
rs7660498	0.14	0.74	0.59	0.05
rs7947345	0.13	0.05	0.04	0.26
rs7963858	0.07	0.11	0.03	0.04
rs929313	0.00	0.15	0.60	0.01
rs1013358	0.06	0.02	0.03	0.69
rs11715850	0.03	0.01	0.01	0.17
rs159150	0.00	0.00	0.00	0.25
rs1805410	0.00	0.37	0.98	0.00
rs1876268	0.05	0.03	0.03	0.32
rs2271347	0.02	0.19	0.74	0.06
rs2541622	0.02	0.01	0.02	0.99
rs2541632	0.02	0.00	0.00	0.25
rs2666428	0.06	0.54	0.11	0.02
rs293784	0.00	0.00	0.00	0.31
rs293794	0.00	0.00	0.00	0.26
rs293795	0.00	0.00	0.00	0.61
rs3093872	0.04	0.07	0.05	0.05
rs3213356	0.06	0.82	0.29	0.03
rs3219090	0.05	0.58	0.12	0.02
rs3219110	0.02	0.02	0.18	0.76
rs3754376	0.06	0.55	0.12	0.02
rs3785288	0.03	0.01	0.02	0.97
rs4135054	0.02	0.01	0.01	0.17
rs4135064	0.01	0.00	0.00	0.16
rs6982453	0.03	0.17	0.97	0.11
rs8191613	0.06	0.02	0.02	0.74
rs8191664	0.06	0.02	0.02	0.74
rs8679	0.02	0.12	0.54	0.10
rs9994685	0.07	0.04	0.05	0.32

TABLE S.6. p-values for SNPs from the Diffuse large B-cell lymphoma case-control study. Only SNPS with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs1075440	0.09	0.07	0.03	0.09
rs11076010	0.02	0.01	0.01	0.74
rs13284	0.02	0.19	0.04	0.01
rs1362570	0.04	0.01	0.01	0.60
rs1563371	0.02	0.20	0.04	0.01
rs17732024	0.06	0.43	0.19	0.02
rs17818824	0.10	0.36	0.14	0.04
rs17819063	0.04	0.02	0.01	0.10
rs1861868	0.06	0.03	0.17	0.94
rs2111115	0.11	0.34	0.07	0.04
rs2160305	0.05	0.02	0.02	0.22
rs2254638	0.05	0.02	0.02	0.55
rs2738963	0.06	0.02	0.02	0.63
rs3088233	0.02	0.20	0.04	0.01
rs4783826	0.10	0.28	0.05	0.03
rs4784329	0.01	0.03	0.48	0.18
rs6499652	0.08	0.30	0.06	0.03
rs6536991	0.01	0.30	0.86	0.01
rs7112793	0.06	0.05	0.06	0.25
rs7143265	0.12	0.96	0.55	0.05
rs7160307	0.12	0.99	0.57	0.05
rs7185783	0.04	0.02	0.05	0.76
rs7188162	0.03	0.01	0.01	0.74
rs7203572	0.13	0.47	0.19	0.05
rs7205009	0.06	0.31	0.05	0.02
rs8061518	0.05	0.02	0.07	0.86
rs9806929	0.03	0.01	0.01	0.89
rs9922619	0.12	0.04	0.09	0.57
rs9924877	0.08	0.03	0.04	0.41
rs9932411	0.08	0.92	0.22	0.03
rs9934504	0.02	0.95	0.36	0.01
rs1233276	0.05	0.02	0.03	0.62
rs12534423	0.06	0.02	0.02	0.58
rs1382539	0.06	0.02	0.04	0.68

rs1540354	0.09	0.04	0.03	0.20
rs1650666	0.12	0.04	0.07	0.65
rs1677703	0.13	0.04	0.07	0.56
rs2035256	0.01	0.26	0.02	0.00
rs3136247	0.01	0.01	0.06	0.45
rs6753135	0.03	0.18	0.49	0.05
rs7709909	0.07	0.16	0.04	0.03
rs7712332	0.03	0.06	0.01	0.02
rs1055362	0.07	0.24	0.02	0.02
rs1549067	0.07	0.24	0.02	0.02
rs2307441	0.07	0.02	0.06	0.94
rs2976239	0.06	0.02	0.05	0.94
rs3730463	0.13	0.04	0.10	0.92
rs3730476	0.07	0.24	0.02	0.02
rs3730478	0.13	0.04	0.10	0.92
rs7963858	0.11	0.28	0.04	0.04
rs139297	0.11	0.10	0.04	0.07
rs16861394	0.08	0.60	0.80	0.04
rs2076472	0.00	0.01	0.00	0.00
rs10007075	0.09	0.03	0.07	0.87
rs13112358	0.08	0.04	0.10	0.86
rs13112390	0.06	0.02	0.04	0.91
rs13140743	0.03	0.01	0.03	0.91
rs1534862	0.11	0.08	0.04	0.11
rs1805410	0.00	0.00	0.02	0.50
rs1876268	0.02	0.02	0.02	0.25
rs2010628	0.11	0.04	0.04	0.41
rs2048073	0.02	0.00	0.01	0.56
rs2301416	0.07	0.38	0.17	0.02
rs2307293	0.10	0.05	0.04	0.25
rs2353005	0.06	0.02	0.05	0.93
rs2854496	0.07	0.03	0.08	0.83
rs2877985	0.11	0.03	0.04	0.64
rs293784	0.02	0.08	0.29	0.10
rs293795	0.02	0.18	0.61	0.05
rs3093872	0.07	0.25	0.19	0.04
rs3136817	0.10	0.03	0.04	0.38
rs3219110	0.07	0.02	0.10	0.69

rs3219472	0.06	0.03	0.11	0.76
rs3219484	0.07	0.03	0.02	0.18
rs3219492	0.06	0.02	0.02	0.33
rs3802168	0.01	0.01	0.03	0.25
rs4840583	0.11	0.04	0.06	0.36
rs6982453	0.13	0.28	0.06	0.05
rs804267	0.06	0.18	0.04	0.02
rs8191604	0.07	0.03	0.02	0.23
rs9821282	0.03	0.03	0.13	0.32
rs9994685	0.02	0.02	0.02	0.25

TABLE S.7. p-values for SNPs from the follicular lymphoma case-control study. Only SNPs with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs1121980	0.06	0.03	0.14	0.99
rs12933996	0.04	0.98	0.22	0.02
rs12935710	0.13	0.06	0.04	0.20
rs13334933	0.01	0.27	0.06	0.00
rs1344502	0.05	0.61	0.35	0.03
rs16952520	0.06	0.32	0.21	0.02
rs17732024	0.02	0.53	0.98	0.01
rs17823199	0.05	0.38	0.61	0.06
rs2075202	0.06	0.85	0.94	0.02
rs2111115	0.11	0.73	0.17	0.04
rs6499652	0.12	0.62	0.15	0.04
rs6536991	0.01	0.08	0.50	0.06
rs7186637	0.01	0.29	0.06	0.00
rs7192835	0.03	0.63	0.26	0.01
rs7194907	0.02	0.02	0.35	0.40
rs7205009	0.10	0.89	0.22	0.04
rs8053966	0.13	0.04	0.05	0.43
rs9921255	0.06	0.79	0.29	0.02
rs9924072	0.08	0.11	0.03	0.04
rs9924877	0.11	0.56	0.15	0.04
rs9930333	0.05	0.02	0.12	0.98
rs9932411	0.09	0.82	0.35	0.05
rs9939973	0.04	0.02	0.13	0.93
rs10191478	0.05	0.06	0.46	0.37
rs1540354	0.00	0.00	0.00	0.61
rs3774332	0.04	0.07	0.16	0.18
rs6151630	0.03	0.45	0.67	0.01
rs1055362	0.07	0.18	0.05	0.03
rs11573531	0.10	0.09	0.04	0.04
rs12432605	0.13	0.96	0.50	0.05
rs1549067	0.05	0.21	0.04	0.02
rs1726801	0.04	0.02	0.03	0.63
rs2445830	0.01	0.00	0.01	0.63
rs2445837	0.01	0.01	0.02	0.33
rs2976239	0.07	0.35	0.51	0.04

rs2979422	0.03	0.22	0.62	0.04
rs3087370	0.07	0.03	0.11	0.86
rs3136788	0.05	0.38	0.24	0.02
rs3730476	0.06	0.25	0.06	0.02
rs4898197	0.09	0.07	0.03	0.04
rs5744903	0.13	0.73	0.45	0.04
rs677740	0.11	0.62	0.36	0.04
rs2076472	0.06	0.06	0.02	0.06
rs10013040	0.09	0.96	0.41	0.04
rs1001581	0.05	0.84	0.32	0.02
rs1130409	0.04	0.01	0.06	0.59
rs1136410	0.03	0.40	0.13	0.01
rs167715	0.01	0.47	0.96	0.00
rs1805410	0.00	0.01	0.08	0.12
rs1805411	0.03	0.34	0.11	0.01
rs2293464	0.01	0.01	0.00	0.03
rs2666428	0.00	0.02	0.00	0.00
rs2793658	0.03	0.31	0.10	0.01
rs2854496	0.05	0.11	0.04	0.03
rs2854501	0.03	0.01	0.01	0.19
rs2854509	0.02	0.01	0.01	0.33
rs2877985	0.07	0.05	0.10	0.52
rs3093872	0.01	0.43	0.25	0.00
rs3093930	0.02	0.35	0.05	0.01
rs3136817	0.14	0.06	0.05	0.21
rs3219090	0.00	0.01	0.00	0.00
rs3219104	0.03	0.35	0.11	0.01
rs3219110	0.00	0.00	0.02	0.84
rs3219474	0.13	0.66	0.46	0.04
rs3219484	0.02	0.01	0.01	0.30
rs3754376	0.00	0.01	0.00	0.00
rs6664761	0.02	0.01	0.00	0.05
rs804292	0.08	0.05	0.03	0.10
rs907190	0.02	0.31	0.10	0.01

TABLE S.8. p-values for SNPs from the marginal zone lymphoma case-control study. Only SNPS with p-values<0.05 for at least one disease model are shown.

SNP ref ID	multiplicative	recessive	additive	dominant
rs11037703	0.02	0.02	0.18	0.43
rs11076008	0.10	0.46	0.18	0.03
rs12445162	0.11	0.90	0.71	0.04
rs12806569	0.09	0.94	0.50	0.03
rs1518818	0.05	0.92	0.41	0.02
rs1554316	0.09	0.98	0.48	0.03
rs16952634	0.04	0.20	0.08	0.01
rs16952649	0.02	0.19	0.09	0.01
rs2254638	0.08	0.34	0.16	0.03
rs2271820	0.09	0.90	0.46	0.04
rs2738963	0.08	0.25	0.12	0.03
rs6499643	0.02	0.01	0.01	0.14
rs7107050	0.07	0.93	0.44	0.03
rs7193851	0.07	0.37	0.17	0.02
rs7199716	0.14	0.43	0.10	0.05
rs12515548	0.07	0.02	0.03	0.81
rs6753135	0.02	0.21	0.58	0.03
rs11094975	0.04	0.03	0.14	0.94
rs11573531	0.00	0.00	0.03	0.96
rs11937432	0.05	0.03	0.02	0.20
rs1858783	0.05	0.27	0.69	0.06
rs2075070	0.12	0.06	0.04	0.15
rs2143296	0.03	0.01	0.01	0.24
rs2233025	0.05	0.02	0.01	0.24
rs2353552	0.08	0.91	0.44	0.03
rs3087374	0.12	0.85	0.64	0.04
rs465969	0.08	0.69	0.95	0.03
rs487989	0.05	0.22	0.59	0.08
rs4883536	0.08	0.92	0.39	0.04
rs668735	0.04	0.26	0.67	0.07
rs7963858	0.04	0.16	0.77	0.13
rs3998860	0.06	0.02	0.02	0.39
rs1001581	0.09	0.83	0.20	0.03
rs12611088	0.09	0.84	0.40	0.05
rs167715	0.11	0.60	0.32	0.03

rs3093872	0.03	0.82	0.59	0.01
rs3093921	0.05	0.07	0.05	0.07
rs3213356	0.15	0.05	0.08	0.46
rs3219484	0.04	0.02	0.02	0.75
rs3219487	0.12	0.04	0.04	0.44

TABLE S.9 SNPs significantly ($p < 0.05$) linked to more than one cancer type. v indicates the link between a genetic variant and disease. SNPs for polymerase genes for breast and prostate cancers are from Swett et al¹⁵.

SNP ID	Gene	breast	prostate	lung	pancreatic	CLL	DLBCL	FL	MZL
rs7160307	<i>ABH1</i>		v	v			v		
rs7116503	<i>ABH3</i>	v			v				
rs12806569	<i>ABH3</i>					v			v
rs1554316	<i>ABH3</i>					v			v
rs17732024	<i>ABH5</i>						v	v	
rs1528494	<i>ABH8</i>	v		v					
rs654093	<i>ABH8</i>				v	v			
rs682334	<i>ABH8</i>				v	v			
rs16952686	<i>FTO</i>	v			v				
rs2302674	<i>FTO</i>	v			v				
rs6499646	<i>FTO</i>	v		v					
rs9924877	<i>FTO</i>	v		v			v	v	
rs8044769	<i>FTO</i>		v		v				
rs9302652	<i>FTO</i>		v	v					
rs7190492	<i>FTO</i>		v		v				
rs8050136	<i>FTO</i>		v		v				
rs1075440	<i>FTO</i>			v	v	v	v		
rs11075997	<i>FTO</i>			v		v			
rs16953047	<i>FTO</i>			v	v				
rs17219084	<i>FTO</i>			v		v			
rs17819033	<i>FTO</i>			v		v			
rs1861868	<i>FTO</i>			v		v	v		
rs708262	<i>FTO</i>			v	v				
rs7188162	<i>FTO</i>			v			v		
rs7193851	<i>FTO</i>			v					v
rs9930333	<i>FTO</i>				v			v	
rs17818824	<i>FTO</i>					v	v		
rs17823199	<i>FTO</i>					v		v	
rs2111115	<i>FTO</i>					v	v	v	
rs6499652	<i>FTO</i>					v	v	v	
rs7203572	<i>FTO</i>					v	v		
rs7185783	<i>FTO</i>					v	v		
rs7192835	<i>FTO</i>					v		v	
rs7205009	<i>FTO</i>					v	v	v	
rs9921255	<i>FTO</i>					v		v	
rs9932411	<i>FTO</i>						v	v	
rs1540354	<i>MLH1</i>						v	v	

rs10514805	<i>MSH2</i>		v		v				
rs4608577	<i>MSH2</i>		v			v			
rs6753135	<i>MSH2</i>						v		v
rs4952887	<i>MSH2</i>		v		v				
rs2035256	<i>MSH3</i>					v	v		
rs3136247	<i>MSH6</i>					v	v		
rs12534423	<i>PMS2</i>					v	v		
rs3789940	<i>DNTT</i>			v		v			
rs3767300	<i>MAD2L2</i>			v		v			
rs11573480	<i>POLA1</i>			v	v				
rs6526404	<i>POLA1</i>			v	v	v			
rs5944697	<i>POLA1</i>			v	v	v			
rs4898197	<i>POLA1</i>			v	v	v		v	
rs4273981	<i>POLA1</i>			v	v				
rs3764770	<i>POLA1</i>			v	v				
rs11573531	<i>POLA1</i>							v	v
rs11094975	<i>POLA1</i>					v			v
rs11573504	<i>POLA1</i>			v		v			
rs11573534	<i>POLA1</i>			v		v			
rs1858783	<i>POLA2</i>			v					v
rs2976239	<i>POLB</i>						v	v	
rs3087370	<i>POLD2</i>					v		v	
rs2075070	<i>POLD2</i>		v						v
rs3824999	<i>POLD3</i>		v	v					
rs1292504	<i>POLD3</i>	v	v						
rs7963858	<i>POLE</i>					v	v		v
rs4883536	<i>POLE</i>					v			v
rs2307449	<i>POLG</i>			v	v				
rs3730463	<i>POLL</i>	v					v		
rs3730476	<i>POLL</i>					v	v	v	
rs1055362	<i>POLL</i>					v	v	v	
rs1549067	<i>POLL</i>					v	v	v	
rs7660498	<i>POLN</i>			v		v			
rs3218651	<i>POLQ</i>	v	v		v				
rs3998860	<i>TET1</i>					v			v
rs12221107	<i>TET1</i>	v		v					
rs2076472	<i>APO2</i>						v	v	
rs139297	<i>APO3H</i>					v	v		
rs3138353	<i>MBD4</i>			v	v				
rs167715	<i>TDG</i>							v	v
rs4135064	<i>TDG</i>				v	v			

rs1866074	<i>TDG</i>			v	v				
rs293784	<i>OGG1</i>		v			v	v		
rs293795	<i>OGG1</i>					v	v		
rs125701	<i>OGG1</i>		v	v					
rs3219487	<i>MUTYH</i>			v					v
rs3219484	<i>MUTYH</i>						v	v	v
rs804267	<i>NEIL2</i>	v					v		
rs804256	<i>NEIL2</i>	v		v					
rs6982453	<i>NEIL2</i>			v		v	v		
rs4840583	<i>NEIL2</i>			v			v		
rs2048075	<i>NEIL3</i>	v	v						
rs1055678	<i>NEIL3</i>	v			v				
rs2877985	<i>NEIL3</i>						v	v	
rs13112390	<i>NEIL3</i>		v				v		
rs13112358	<i>NEIL3</i>		v	v			v		
rs9994685	<i>NEIL3</i>					v	v		
rs1876268	<i>NEIL3</i>				v	v	v		
rs3136817	<i>APEX1</i>						v	v	
rs2854501	<i>XRCC1</i>			v				v	
rs3213356	<i>XRCC1</i>					v			v
rs1001581	<i>XRCC1</i>							v	v
rs2854496	<i>XRCC1</i>						v	v	
rs1805410	<i>PARP1</i>	v				v	v	v	
rs3219110	<i>PARP1</i>					v	v	v	
rs1805411	<i>PARP1</i>			v				v	
rs1136410	<i>PARP1</i>			v				v	
rs2666428	<i>PARP1</i>					v		v	
rs3219090	<i>PARP1</i>					v		v	
rs3754376	<i>PARP1</i>					v		v	
rs3093872	<i>PARP2</i>		v			v	v	v	v
rs3093921	<i>PARP2</i>				v				v

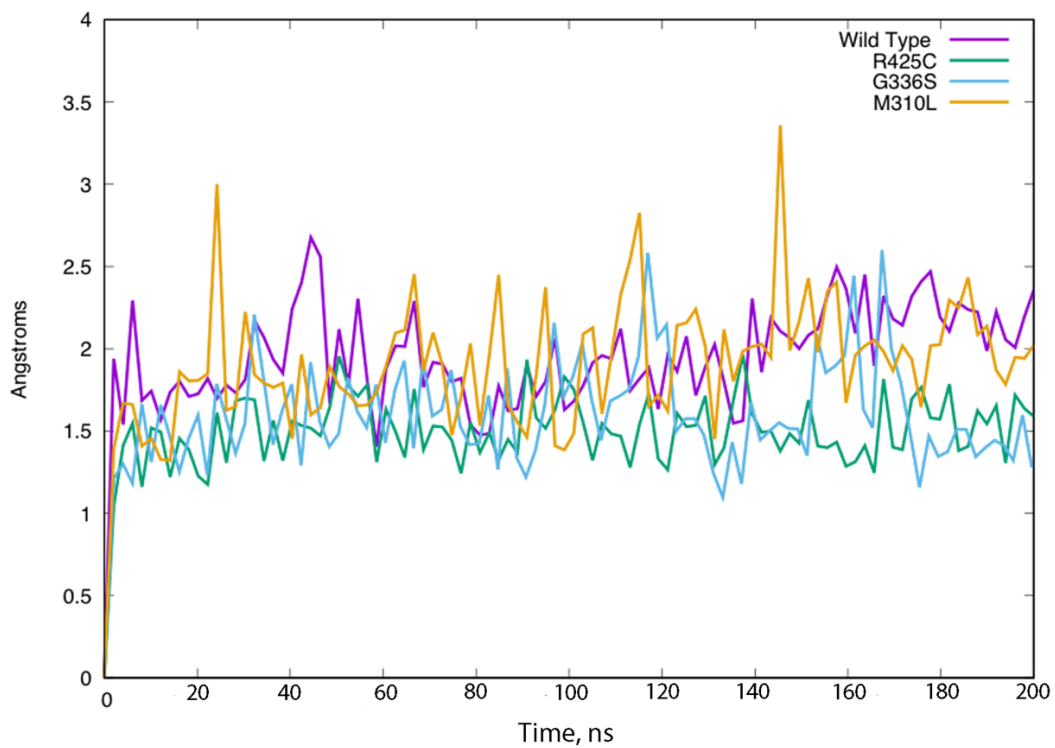


Figure S1. RMSD of DNA (only) in the holo structures of Pol v.

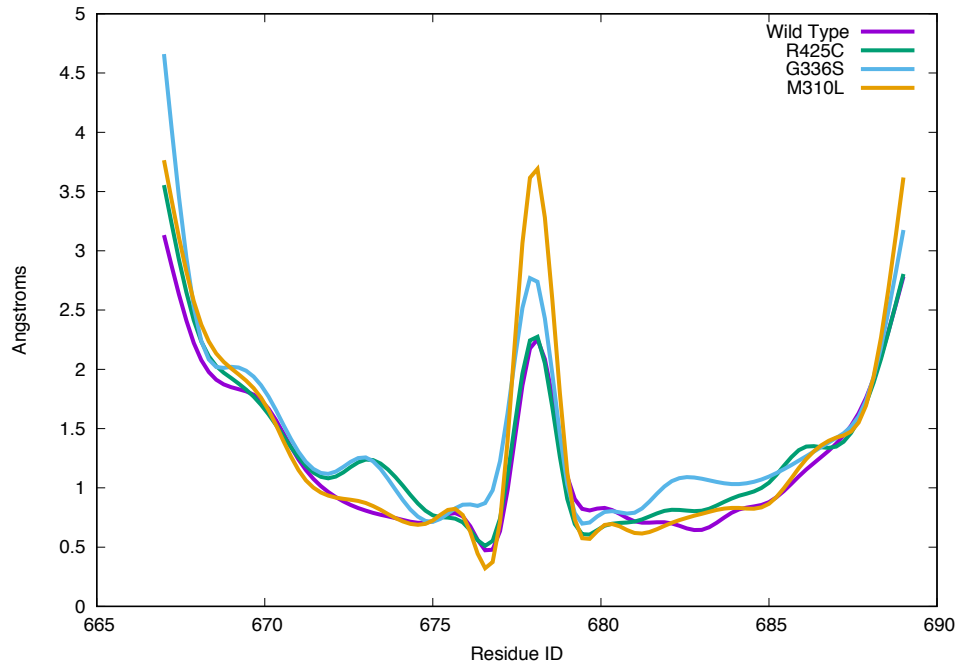


Figure S2. RMSF of DNA in the holo structures of Pol v.

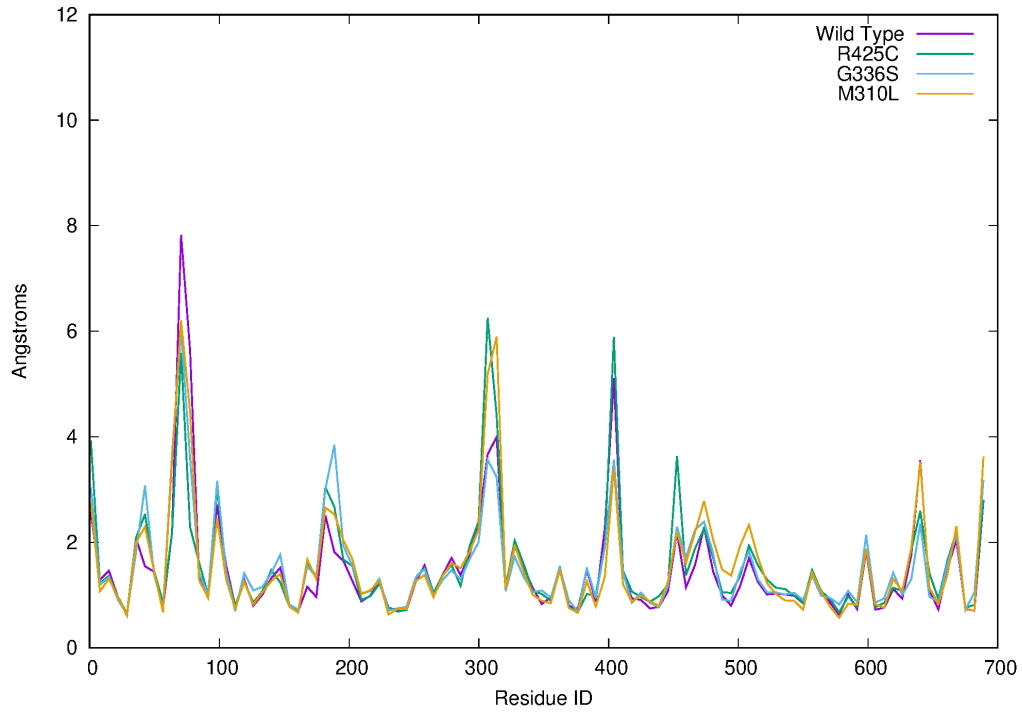


Figure S3. RMSF per residue for each system for simulation replicate 1.

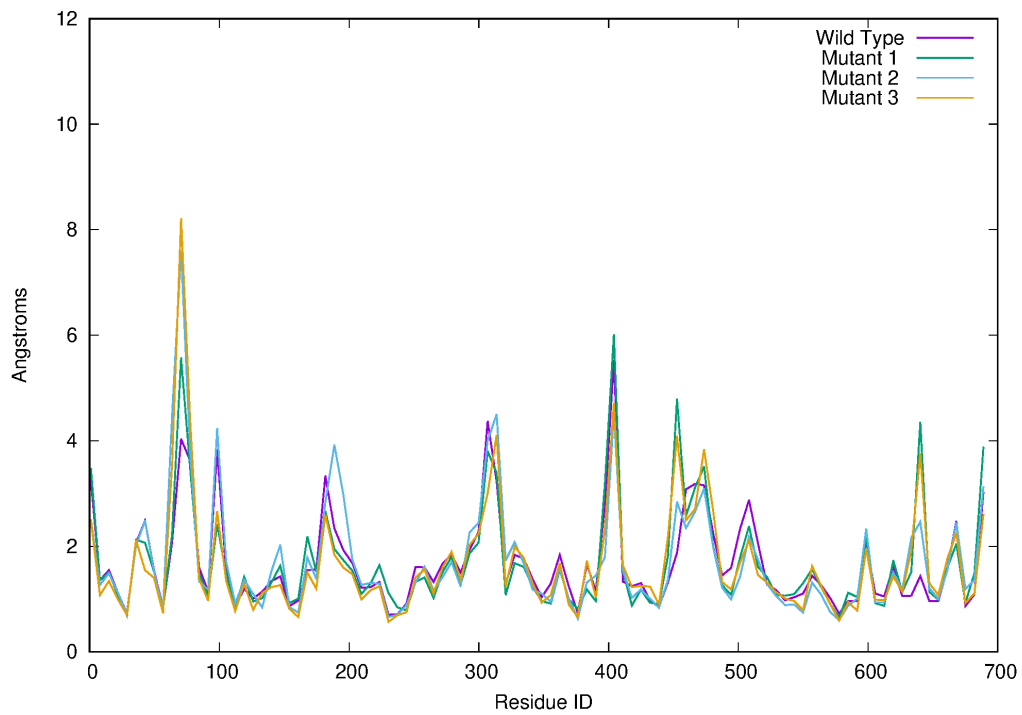


Figure S4. RMSF per residue for each system for simulation replicate 2.

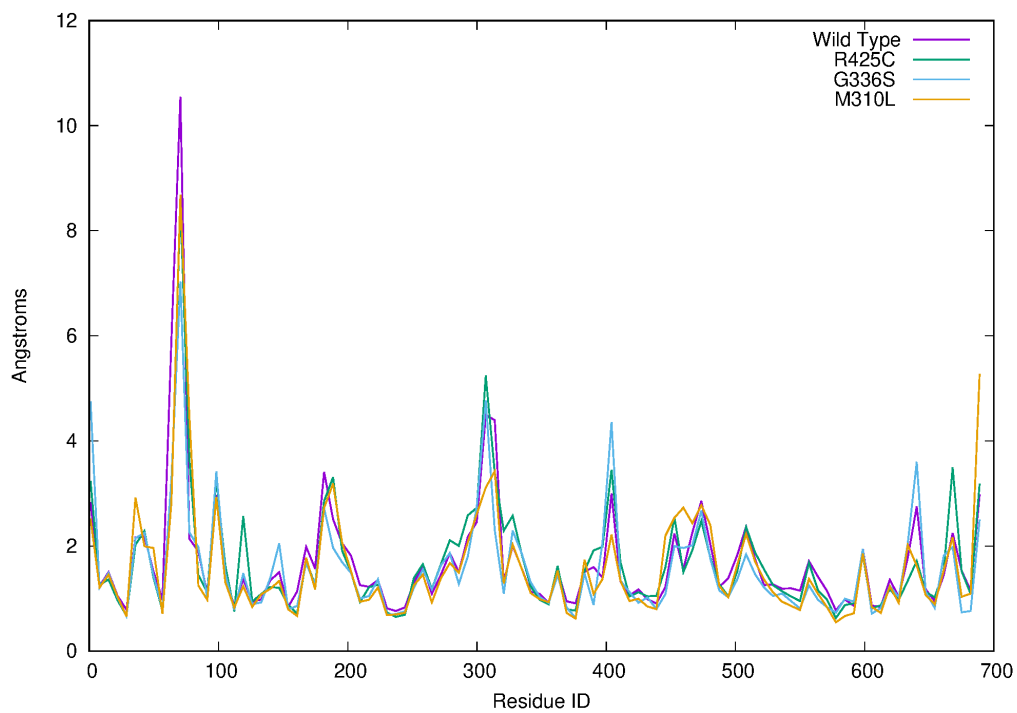


Figure S5. RMSF per residue for each system for simulation replicate 3.

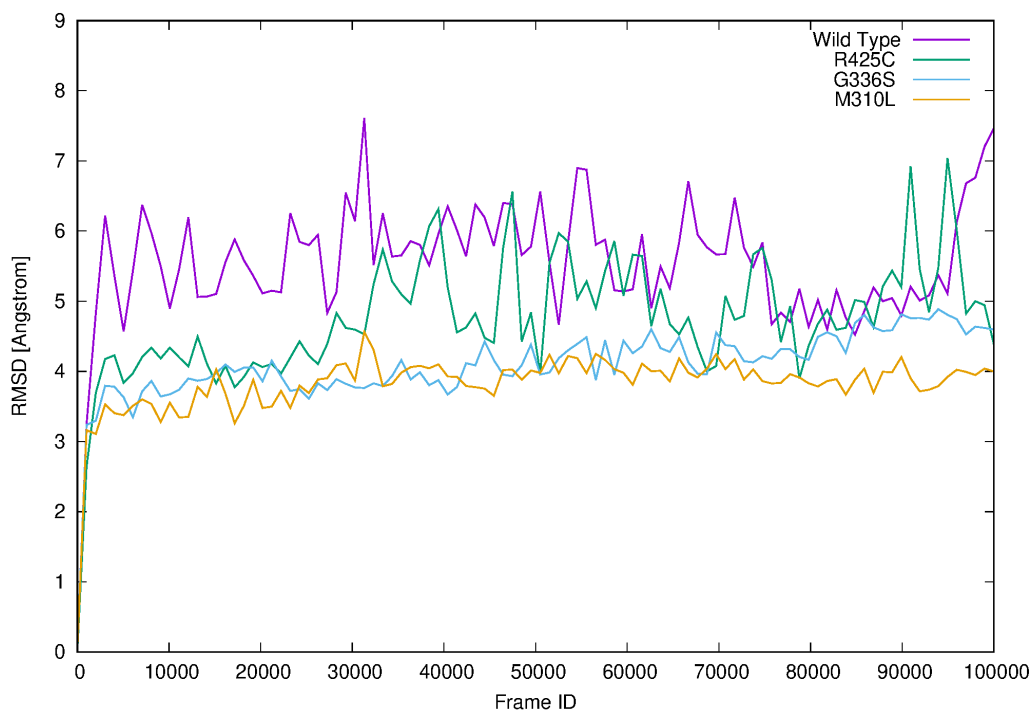


Figure S6 RMSD for all systems without DNA bound