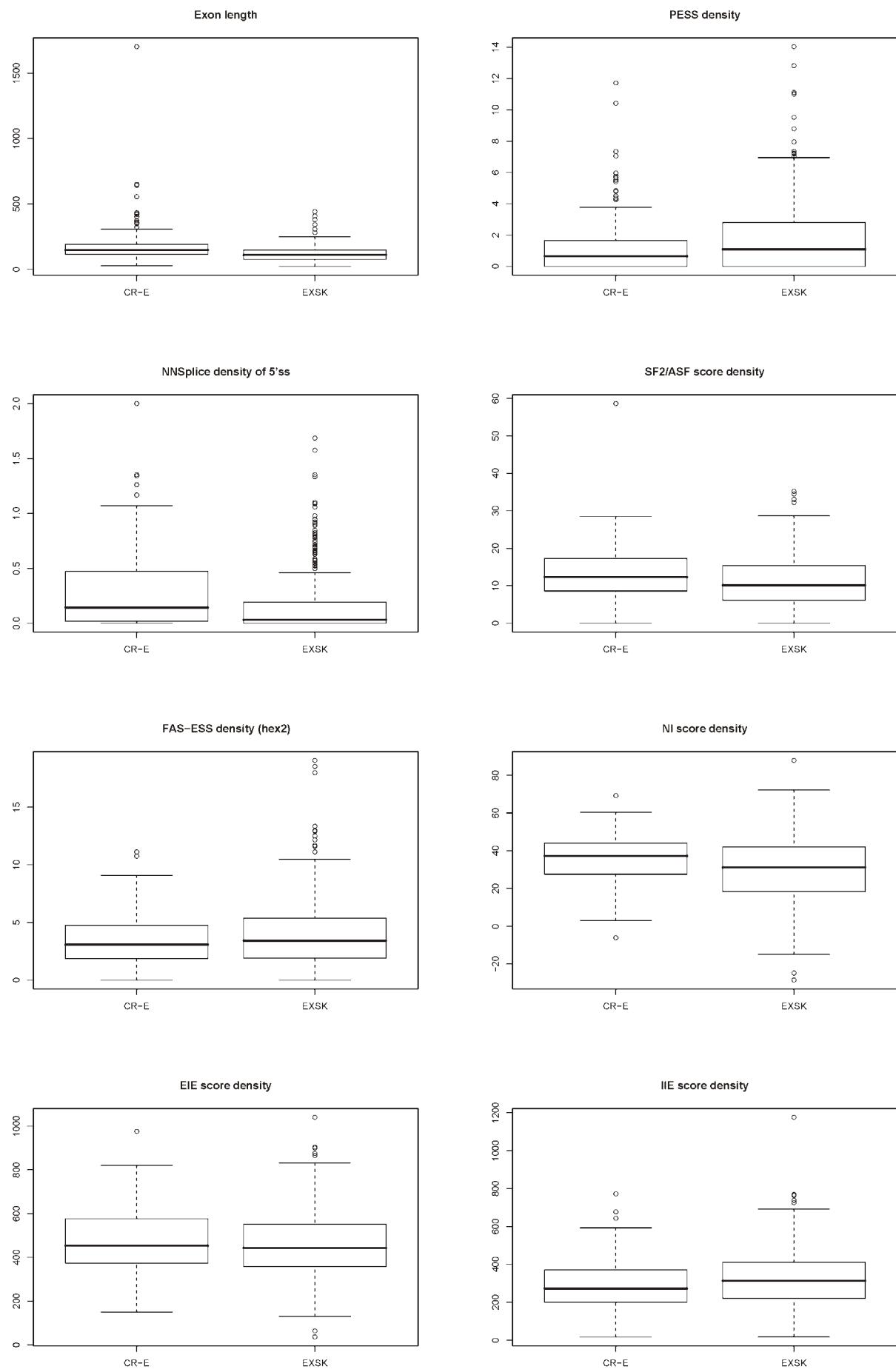
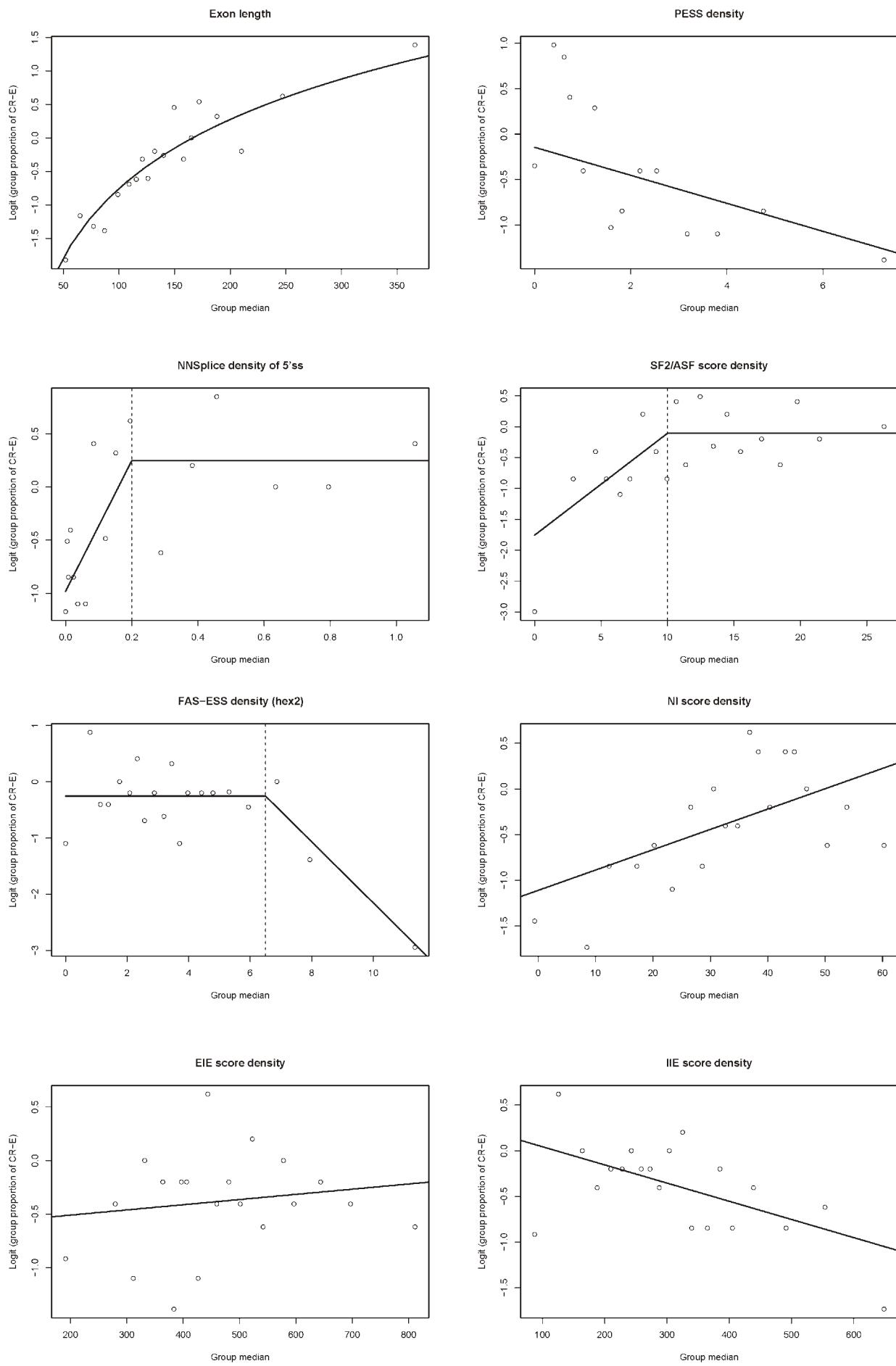


Supplementary Figure 1. Dispersion of predictor values in the full dataset



Supplementary Figure 2. Transformation of selected predictor variables



**Supplementary Table 1. Identity of 47 exons that were skipped as a result of disease-causing splice-site mutations**

Number	Exon length <sup>1</sup>	Gene <sup>2</sup>	Exon number	Pub Med Reference
>251	139	<i>ALB</i>	11	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17644793?ordinalpos=46&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17644793?ordinalpos=46&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>252	94	<i>MLH1</i>	10	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17653898?ordinalpos=44&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17653898?ordinalpos=44&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>253	86	<i>ALDH3A2</i>	2	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17902024?ordinalpos=32&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17902024?ordinalpos=32&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>254	144	<i>ALPL</i>	7	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17922851?ordinalpos=31&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17922851?ordinalpos=31&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>255	157	<i>SETX</i>	15	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18350359?ordinalpos=8&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18350359?ordinalpos=8&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>256	109	<i>AP1S2</i>	3	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17617514?ordinalpos=50&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17617514?ordinalpos=50&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>257	71	<i>ARSB</i>	6	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17643332?ordinalpos=48&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17643332?ordinalpos=48&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>258	244	<i>ARSB</i>	5	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17643332?ordinalpos=48&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17643332?ordinalpos=48&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>259	207	<i>COL2A1</i>	2	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17721977?ordinalpos=42&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17721977?ordinalpos=42&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>260	193	<i>DFNA5</i>	8	<a href="http://www.ncbi.nlm.nih.gov/pubmed/14676472?ordinalpos=5&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/14676472?ordinalpos=5&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>261	156	<i>DMD</i>	25	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18348289?ordinalpos=9&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18348289?ordinalpos=9&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>262	127	<i>GRN</i>	7	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18183624?ordinalpos=19&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18183624?ordinalpos=19&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>263	36	<i>ATP2C1</i>	5	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18372165?ordinalpos=6&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18372165?ordinalpos=6&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>264	115	<i>IRAK4</i>	7	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17878374?ordinalpos=37&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17878374?ordinalpos=37&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>265	171	<i>BRCA2</i>	17	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18424508?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18424508?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>266	249	<i>BRCA2</i>	3	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18424508?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18424508?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>267	245	<i>BRCA2</i>	25	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18424508?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18424508?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>268	128	<i>LAMA2</i>	17	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18053718?ordinalpos=27&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18053718?ordinalpos=27&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>269	116	<i>MPV17</i>	2	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18329934?ordinalpos=13&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18329934?ordinalpos=13&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>270	127	<i>NR2E3</i>	2	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18294254?ordinalpos=15&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18294254?ordinalpos=15&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>271	87	<i>PHEX</i>	4	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18252791?ordinalpos=16&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18252791?ordinalpos=16&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>272	157	<i>CC2D2A</i>	19	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18387594?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18387594?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>273	118	<i>POMGNT1</i>	7	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18330676?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18330676?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>274	140	<i>MYBPC3</i>	30	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17937428?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17937428?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>275	127	<i>RB1</i>	2	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>276	116	<i>RB1</i>	3	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>277	78	<i>RB1</i>	9	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>278	110	<i>RB1</i>	10	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>279	88	<i>RB1</i>	12	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>280	117	<i>RB1</i>	13	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>281	32	<i>RB1</i>	15	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
>282	197	<i>RB1</i>	17	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed_Pubmed_ResultsPanel.Pubmed_RVDocSum</a>

>283	146	<i>RB1</i>	19	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>284	105	<i>RB1</i>	21	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>285	31	<i>RB1</i>	24	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>286	143	<i>RB1</i>	25	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18181215?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>287	156	<i>SLC12A3</i>	14	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17414160?ordinalpos=6&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17414160?ordinalpos=6&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>288	71	<i>SPG4</i>	15	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18190593?ordinalpos=18&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18190593?ordinalpos=18&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>289	110	<i>F11</i>	6	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18327400?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18327400?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>290	107	<i>F11</i>	4	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18327400?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18327400?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>291	78	<i>EIF2B5</i>	2	<a href="http://www.ncbi.nlm.nih.gov/pubmed/18294360?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18294360?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>292	49	<i>CD19</i>	6	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17882224?ordinalpos=5&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17882224?ordinalpos=5&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>293	75	<i>OPA1</i>	12	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17722006?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17722006?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>294	131	<i>OPA1</i>	15	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17722006?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17722006?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>295	125	<i>KIND1</i>	10	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17854379?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17854379?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>296	193	<i>DFNA5</i>	8	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17868390?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17868390?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>
>297	113	<i>LAMA2</i>	58	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17949279?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17949279?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed_RVDocSum</a>

Footnote: <sup>1</sup>exon length is in nucleotides. <sup>2</sup>, gene designation is according to the HUGO Gene Nomenclature Committee.

**Supplemental Table 2. Values of predictor variables for each exon**

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	57	0	0	14.347	8.772	14.888	508.467	242.415
0	0	105	3.810	0.133	10.234	10.476	18.331	364.650	347.612
0	0	96	2.083	0.010	6.419	4.167	28.545	874.358	382.065
0	0	158	3.797	0.259	1.482	3.165	18.067	591.991	535.705
0	0	62	1.613	0	10.117	1.613	40.180	537.036	90.962
0	0	116	0	0.017	23.213	6.034	34.651	369.193	307.375
1	0	72	0	0.139	24.767	5.556	36.050	267.291	316.581
0	0	130	2.308	0	19.299	0.769	42.086	596.593	111.233
0	0	134	2.239	0.067	7.219	2.239	36.067	659.179	392.362
0	0	118	1.695	0.017	10.364	2.542	31.749	621.668	336.734
0	0	167	7.186	0.497	0	1.198	16.644	587.357	364.635
0	0	144	4.167	0.306	3.537	5.556	14.995	376.424	366.229
0	0	59	0	0.424	32.170	5.085	20.538	313.341	271.354
0	0	147	0	0.660	8.155	4.762	38.168	373.869	346.430
1	0	379	2.375	0.011	7.279	2.111	26.663	331.519	341.046
0	0	218	0.917	0.032	5.778	1.376	32.645	395.809	413.166
0	0	158	1.266	0	7.356	1.899	47.797	659.483	189.590
0	0	57	1.754	0.754	0	0	35.848	692.396	363.758
0	0	102	1.961	0.127	6.776	0.980	31.188	440.311	406.561
0	0	239	3.766	0.013	9.017	0.837	18.032	538.253	361.103
1	0	164	3.049	0.006	3.130	1.220	16.828	478.165	378.029
0	0	126	1.587	0.063	6.423	7.937	9.263	439.037	474.231
1	0	126	6.349	0.008	6.336	2.381	18.624	473.473	326.764
0	0	83	1.205	0.024	2.701	4.819	25.416	630.571	317.839
0	0	131	3.817	0.214	4.510	4.580	4.025	288.042	343.935
0	0	174	3.448	0.046	5.426	2.874	27.955	609.817	578.768
0	0	165	1.818	0	7.676	6.667	8.501	381.942	518.007
0	0	133	3.008	0.737	9.367	4.511	34.074	578.014	285.713
1	0	88	0	0.045	6.985	5.682	35.422	899.012	238.860
0	0	89	4.494	0.011	3.894	17.978	6.679	548.099	530.404
1	0	105	2.857	0.019	5.229	0	30.602	648.413	159.764
0	0	159	4.403	0.403	13.503	1.887	23.647	511.418	280.416
0	0	141	0.709	0.348	13.402	6.383	10.044	495.582	281.970
0	0	115	1.739	0.017	12.708	4.348	11.929	306.722	581.399
0	0	234	3.846	0.158	4.870	2.991	8.572	354.446	509.374
1	0	162	1.235	0	10.551	3.704	26.653	336.286	232.753
0	0	204	2.451	0.093	20.749	9.314	32.154	289.646	322.575
0	0	78	1.282	0.013	5.793	0	33.137	480.370	263.661
0	0	89	4.494	0	2.433	6.742	-0.101	387.882	442.157
0	0	82	0	0	9.865	0	37.047	521.593	245.704

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	63	4.762	0.159	12.349	0	21.663	584.565	49.220
0	0	217	0.461	0.009	8.137	1.382	51.707	493.260	188.941
0	0	119	0	0.008	15.019	5.882	25.173	210.046	336.599
0	0	169	0	0.462	15.839	6.509	38.502	430.976	352.735
0	0	307	1.303	0.013	13.317	5.537	22.081	282.233	437.393
0	0	63	1.587	0	0	19.048	-24.813	35.721	1175.634
0	0	48	0	0	13.948	0	45.477	485.588	89.438
0	0	111	0	0	13.474	0.901	41.688	591.480	398.583
0	0	109	11.009	0	2.900	7.339	-4.014	526.100	664.347
0	0	216	2.315	0.060	9.171	3.704	14.440	457.563	385.142
0	0	87	4.598	0	0	2.299	7.025	630.275	685.181
1	0	115	0	0	15.753	5.217	31.498	316.697	219.820
0	0	242	0	0.008	19.159	2.479	46.661	309.584	267.307
0	0	54	0	0.056	15.774	12.963	40.339	690.934	242.886
0	0	54	0	0.630	8.024	3.704	60.179	280.530	209.135
0	0	108	0	0.046	9.673	7.407	57.907	526.004	214.502
0	0	54	0	0.019	5.079	0	50.087	766.048	341.859
0	0	54	0	0.074	0	3.704	48.329	406.136	269.034
0	0	54	0	0.111	0	3.704	64.131	622.168	166.790
1	0	54	0	0.074	0	3.704	58.199	482.011	215.593
0	0	54	0	1.574	25.235	1.852	72.161	817.434	103.032
1	0	54	0	1.685	19.053	9.259	43.277	273.687	346.164
0	0	99	1.010	0.030	15.277	3.030	52.736	699.373	217.233
0	0	45	6.667	0.889	0	13.333	-13.217	172.758	403.470
0	0	54	0	0	18.379	3.704	51.730	366.415	157.558
0	0	99	1.010	0.919	9.167	2.020	40.718	458.134	261.410
0	0	54	1.852	0.130	14.201	3.704	53.543	903.475	119.469
0	0	54	0	0.019	24.071	3.704	59.093	730.356	183.877
0	0	45	0	0.400	11.763	2.222	43.876	337.744	105.099
1	0	54	0	0	8.521	3.704	43.552	525.751	182.071
1	0	108	0.926	1.352	9.467	2.778	57.624	831.288	268.760
0	0	54	0	0.648	6.151	11.111	48.376	401.926	222.379
0	0	108	0.926	0.019	20.908	4.630	29.746	288.956	325.958
0	0	54	0	0	10.165	9.259	51.211	551.704	189.912
0	0	54	0	0.259	13.715	0	51.344	339.206	384.811
0	0	165	0	0.067	17.753	3.636	48.547	412.864	168.583
0	0	81	0	1.099	5.533	11.111	45.683	563.864	203.422
0	0	99	0	0.232	13.108	8.081	44.754	543.835	249.548
0	0	213	2.347	0.413	14.326	3.756	26.709	397.912	319.173
0	0	178	2.247	0	5.152	1.685	17.249	368.001	238.940

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	54	0	0.037	15.885	18.519	18.600	221.137	299.517
1	0	51	0	0	33.044	0	68.132	616.062	99.373
1	0	36	0	0	9.766	5.556	44.393	726.560	91.268
0	0	36	0	1.333	16.822	2.778	54.838	413.796	213.361
0	0	103	0.971	0.117	18.863	5.825	38.734	701.832	399.918
0	0	105	0.952	0.029	1.892	4.762	17.761	243.278	477.104
0	0	139	0	0.698	8.078	2.158	49.239	416.109	99.710
0	0	198	1.010	0.035	5.133	2.525	27.550	426.377	335.619
1	0	79	0	0	10.598	0	47.766	594.757	331.211
1	0	102	1.961	0.039	9.037	0.980	39.510	676.115	317.571
1	0	130	0	0	14.460	5.385	34.809	501.741	258.979
1	0	146	0.685	0	11.400	4.110	40.006	472.372	219.038
1	0	86	3.488	0.081	19.054	2.326	31.448	365.083	454.334
0	0	165	1.818	0.152	6.702	1.212	36.407	405.555	282.803
0	0	134	0	0.015	12.051	2.239	28.698	318.194	562.911
0	0	71	4.225	0	8.831	9.859	8.686	330.370	221.228
0	0	69	0	0.014	18.240	11.594	35.713	256.142	384.787
0	0	152	0	0.026	13.241	-0.0001.974	31.236	264.412	293.637
1	0	163	0	0	16.849	1.840	57.256	350.745	143.676
0	0	161	0.621	0.056	20.177	6.832	29.073	343.297	339.685
0	0	161	0	0	26.670	3.106	54.399	589.652	87.406
1	0	114	0	0.096	12.110	6.140	38.143	382.589	231.904
1	0	110	0	0.691	8.138	7.273	15.434	696.976	343.028
0	0	123	3.252	0.033	9.014	3.252	16.336	355.011	392.851
0	0	117	6.838	0.026	11.634	3.419	25.619	357.585	189.839
0	0	117	2.564	0	6.328	2.564	16.657	409.405	626.633
0	0	156	0	0.006	12.037	5.128	18.990	429.503	286.738
0	0	177	3.390	0.520	11.130	1.130	41.510	457.402	243.929
0	0	162	0	0	16.656	2.469	33.639	382.757	443.012
0	0	203	0.493	0.192	16.491	3.941	43.130	398.917	403.367
1	0	83	7.229	0.012	5.751	3.614	17.087	694.233	447.438
0	0	126	4.762	0.048	0	0	22.079	595.794	294.596
1	0	126	0.794	0.778	10.571	4.762	21.228	449.463	514.258
1	0	126	0	0	9.792	1.587	38.923	607.316	274.766
0	0	123	2.439	0.203	14.556	3.252	39.529	394.460	343.191
0	0	117	3.419	0.009	4.196	3.419	21.702	417.255	353.429
0	0	126	1.587	0.230	6.627	4.762	28.636	405.805	515.856
0	0	126	0.794	0.802	17.074	5.556	32.467	570.705	373.272
0	0	126	2.381	0.373	6.551	7.937	3.464	223.820	461.911
0	0	184	2.174	0.005	6.512	3.804	43.815	561.861	235.450

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	91	0	0.945	14.724	7.692	33.645	499.636	272.956
0	0	110	4.545	0.155	5.092	2.727	17.101	403.390	691.431
0	0	85	2.353	0.024	5.047	5.882	36.985	429.998	339.430
0	0	120	0	0	14.183	3.333	42.371	679.953	155.845
0	0	70	4.286	0	3.166	1.429	28.530	383.924	28.538
1	0	92	3.261	0.978	4.035	2.174	25.912	317.752	473.557
1	0	198	1.010	0.586	9.666	3.535	34.571	271.265	205.417
0	0	220	2.727	0	13.277	2.727	21.937	236.599	304.652
0	0	93	0	0.043	18.325	1.075	21.613	643.671	597.110
0	0	47	0	0	21.376	6.383	30.142	303.626	637.619
1	0	111	2.703	0	7.644	1.802	31.476	412.635	394.281
0	0	66	3.030	0	4.948	9.091	24.646	508.162	494.978
0	0	114	7.018	0	10.666	4.386	9.948	323.292	737.978
0	0	73	0	0	11.243	5.479	41.904	486.206	402.607
0	0	50	6	0	25.551	0	6.946	245.043	249.405
0	0	120	0	0.067	10.014	8.333	45.731	322.272	373.457
0	0	54	1.852	0	3.788	3.704	43.009	482.883	183.760
1	0	54	0	0.093	16.146	1.852	50.259	697.658	165.959
1	0	107	3.738	0.280	10.174	7.477	2.193	448.529	581.204
0	0	66	3.030	0.258	11.856	1.515	34.522	472.729	252.105
0	0	47	0	0.170	17.787	2.128	53.067	513.006	438.148
0	0	77	1.299	0.104	7.662	11.688	6.070	317.309	763.580
0	0	70	0	1.057	16	7.143	32.529	267.916	179.691
0	0	137	0	0.547	7.363	5.109	30.211	310.081	321.637
1	0	74	1.351	0.041	6.964	12.162	26.845	464.843	396.205
1	0	185	1.081	0	14.149	3.243	38.587	498.709	198.839
0	0	138	0	0.942	15.565	0.725	54.163	396.790	98.554
0	0	90	1.111	0	14.811	4.444	45.007	556.608	56.712
0	0	94	1.064	0.064	5.252	7.447	36.989	504.380	529.192
0	0	111	0	0.396	9.353	3.604	23.079	320.860	375.011
0	0	99	0	0.101	13.047	1.010	49.477	465.510	325.005
0	0	123	1.626	0.569	15.106	4.065	43.049	349.790	298.043
0	0	72	6.944	0.014	8.143	1.389	32.035	414.860	313.698
0	0	73	0	0	7.297	1.370	57.602	670.767	69.662
0	0	89	0	0.169	11.747	4.494	28.769	549.858	265.305
1	0	149	2.013	0	14.567	3.356	39.752	733.446	300.288
0	0	64	0	0	7.046	6.250	-14.888	415.229	611.466
0	0	165	3.030	0	10.396	3.030	37.948	555.659	469.841
1	0	114	0.877	0.018	21.039	1.754	34.416	545.002	281.581
0	0	160	1.250	0.006	10.828	3.125	23.965	350.007	274.988

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	130	0	0	14.460	5.385	34.809	501.741	258.979
0	0	83	0	0	13.182	3.614	44.725	704.373	124.670
0	0	57	0	0	19.872	7.018	35.728	373.378	535.011
1	0	77	2.597	0	13.113	0	24.640	407.283	176.361
0	0	223	0	0.027	10.733	2.242	45.040	465.052	235.045
0	0	144	11.111	0.333	10.659	2.083	3.898	377.554	277.746
0	0	76	0	0.053	9.625	2.632	26.446	477.110	264.223
0	0	174	1.724	0.161	2.969	2.299	22.398	406.778	461.982
0	0	123	4.065	0.813	9.594	3.252	25.702	393.742	483.441
0	0	74	0	0	15.239	0	72.028	356.743	115.914
0	0	441	0.907	0.639	10.651	4.535	30.166	396.435	427.947
0	0	123	4.878	0.024	3.645	5.691	8.595	431.948	400.269
0	0	182	1.648	0.341	12.850	1.648	29.154	316.799	241.782
0	0	104	2.885	0.048	0	4.808	20.199	540.999	409.945
0	0	136	0.735	0.199	9.767	3.676	45.804	413.683	230.025
0	0	341	2.053	0.085	10.021	2.639	23.123	334.764	201.981
0	0	280	2.857	0.246	7.204	5	7.088	302.402	422.403
0	0	215	1.395	0.247	9.774	5.581	27.768	425.968	444.941
1	0	102	0	0.010	4.539	1.961	23.270	466.565	164.322
1	0	101	4.950	0.782	13.452	4.950	-5.439	307.160	657.693
0	0	135	1.481	0.244	5.991	0	24.735	865.155	312.617
0	0	124	6.452	0	9.252	3.226	-5.425	378.494	348.979
0	0	84	9.524	0.155	12.072	5.952	28.553	567.843	258.383
1	0	107	1.869	0	8.246	7.477	2.372	392.980	549.865
0	0	201	3.483	0.378	5.545	4.478	16.507	452.135	490.491
1	0	72	0	0	6.800	1.389	28.172	282.561	165.104
0	0	87	1.149	0	15.378	1.149	10.440	260.797	508.891
0	0	81	3.704	0.012	3.566	3.704	31.800	709.355	306.538
0	0	94	3.191	0	6.969	3.191	2.209	318.017	493.684
0	0	54	0	0.074	20.603	12.963	12.129	332.098	158.542
1	0	184	1.087	0.043	8.422	0	45.589	578.145	233.713
0	0	136	0	0.015	17.684	2.941	27.702	282.360	374.714
1	0	96	0	0.042	5.049	4.167	15.434	336.501	587.269
1	0	77	5.195	0.052	16.585	7.792	15.104	392.229	548.624
1	0	61	0	0	3.352	0	47.187	362.589	18.581
0	0	151	0.662	0	25.092	3.974	34.635	643.743	140.182
0	0	116	1.724	0.009	10.999	2.586	38.409	426.443	116.068
0	0	151	1.987	0.185	20.734	1.325	30.502	401.184	55.244
0	0	144	1.389	0.007	8.551	1.389	24.245	420.234	290.925
0	0	111	2.703	0.135	11.135	0.901	5.472	291.935	344.744

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
1	0	48	0	0	13.871	2.083	-9.955	384.115	682.317
0	0	100	1	0	17.984	2	52.073	580.951	180.400
1	0	59	3.390	0.220	10.664	0	15.847	304.289	254.649
0	0	407	0.246	0.221	19.608	3.194	40.537	449.393	220.710
0	0	65	0	0	19.073	1.538	49.658	191.317	213.761
0	0	55	0	0.036	4.643	9.091	8.436	471.411	566.898
0	0	111	5.405	0	5.020	9.009	7.387	674.594	217.733
1	0	78	2.564	0.628	12.839	5.128	15.068	506.263	434.247
0	0	132	0	0.038	23.727	3.788	44.517	471.014	159.041
0	0	167	0	0.042	16.570	1.796	48.277	294.437	377.530
0	0	170	0.588	0.065	10.119	3.529	28.096	404.402	252.146
0	0	143	0.699	0.301	18.491	3.497	58.132	820.083	228.620
1	0	126	0	0.063	9.586	0.794	35.209	517.547	561.893
0	0	45	0	0	0	8.889	18.939	443.107	457.342
1	0	44	4.545	0	12.240	2.273	18.202	499.413	355.509
0	0	142	3.521	0	5.350	2.817	16.047	408.940	460.714
0	0	167	1.796	0.389	9.646	2.395	27.983	489.604	385.094
0	0	152	1.974	0	18.373	7.237	33.775	696.649	254.122
0	0	91	8.791	0	2.907	4.396	-0.640	530.583	671.631
0	0	23	0	0	26.504	4.348	30.853	542.339	555.819
0	0	57	14.035	0	3.487	1.754	23.794	693.593	227.155
0	0	132	0.758	0.008	11.125	2.273	54.102	728.689	198.252
0	0	68	7.353	0	0	4.412	-4.673	188.914	533.015
0	0	122	1.639	0.008	6.842	8.197	14.454	255.842	411.969
1	0	74	4.054	0	6.839	5.405	11.909	297.256	592.810
0	0	126	4.762	1.087	1.779	3.175	-0.287	390.457	599.646
1	0	81	6.173	0.543	7.102	4.938	-1.530	375.155	473.548
0	0	80	5	0	19.413	7.500	-2.094	251.885	768.896
0	0	101	2.970	0	4.814	2.970	20.966	719.413	285.327
0	0	112	2.679	0.009	1.874	5.357	11.172	309.830	725.090
0	0	112	0	0.080	11.397	5.357	32.272	550.623	199.767
1	0	110	0	0.009	10.516	2.727	39.333	213.015	398.031
0	0	188	2.128	0.080	5.402	3.723	28.494	533.898	194.296
0	0	72	2.778	0	0	4.167	19.436	305.440	173.314
1	0	92	1.087	0	3.953	3.261	19.560	534.137	611.441
1	0	80	2.500	0.025	18.044	5	26.082	352.185	381.399
0	0	197	0	0.122	15.861	2.030	47	539.801	365.193
0	0	50	0	0	26.062	2	70.179	824.955	266.890
0	0	185	0.541	0.124	18.602	2.703	45.719	458.808	306.113
0	0	163	3.067	0.043	7.136	2.454	23.584	717.154	371.228

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	99	1.010	0.788	9.261	6.061	39.062	395.965	421.956
0	0	74	0	0.041	13.247	2.703	61.963	456.822	111.142
0	0	44	0	0.045	20.692	4.545	39.170	497.093	430.005
0	0	163	3.681	0.018	8.555	1.227	12.807	314.498	640.499
0	0	63	0	0	10.028	1.587	19.441	162.836	338.191
0	0	162	1.235	0.401	11.560	3.704	37.399	368.520	278.648
0	0	40	2.500	0	14.482	7.500	12.577	588.355	201.391
1	0	87	0	0	17.748	0	43.209	428.522	248.020
1	0	97	2.062	0.845	35.156	1.031	33.628	247.790	64.551
0	0	151	1.325	0.119	21.197	0	41.321	398.003	257.205
0	1	79	2.532	0.127	21.790	1.266	10.921	189.468	337.033
0	1	62	3.226	0	13.524	0	60.303	632.112	68.326
1	1	59	0	0.203	14.908	0	40.709	302.668	17.108
0	1	119	0.840	0.134	10.218	3.361	45.313	726.868	382.933
0	1	178	1.124	0	12.931	0.562	30.084	330.342	370.401
0	1	126	1.587	0.008	2.591	0.794	14.313	388.469	330.845
0	1	372	1.882	0.207	8.045	5.376	15.239	441.373	335.095
0	1	177	2.825	0.011	6.979	3.390	29.625	538.920	593.390
0	1	156	4.487	0.135	4.867	4.487	8.964	449.560	587.011
0	1	166	3.614	0	10.731	4.819	7.483	291.077	581.592
0	1	140	0.714	0.386	4.273	4.286	36.365	649.399	172.859
0	1	139	5.755	0.014	16.642	7.194	11.243	394.409	568.619
1	1	106	0	0.009	11.722	2.830	29.184	594.846	321.217
0	1	201	0.498	0.015	19.221	2.985	29.503	267.709	210.299
0	1	119	0	0	10.804	3.361	40.507	149.641	285.557
0	1	284	1.056	0.141	11.316	4.225	33.708	444.698	331.727
0	1	63	0	0.159	19.816	4.762	33.115	361.131	233.762
0	1	27	0	0	58.576	3.704	34.595	485.554	126.490
1	1	81	0	0.531	27.242	3.704	57.391	673.504	157.350
0	1	54	0	0.019	5.079	0	50.087	794.207	341.859
0	1	54	1.852	1.259	5.098	5.556	31.191	399.861	221.523
0	1	108	0	0.120	13.374	1.852	58.701	819.433	196.821
1	1	45	0	0	15.038	11.111	60.088	819.728	243.767
0	1	132	0	0.182	23.167	0.758	37.858	507.379	257.817
0	1	63	0	0.143	19.694	4.762	53.982	437.390	135.232
0	1	130	0	0.785	9.955	2.308	52.165	432.909	271.878
0	1	154	0	0.013	8.851	5.195	23.898	208.953	491.950
0	1	181	0.552	0	11.707	2.762	44.850	700.918	301.287
0	1	124	0	0.532	16.925	2.419	37.631	342.013	145.490
0	1	320	0.625	0.119	14.534	1.875	38.704	404.678	319.474

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	1	209	4.785	0.005	5.192	4.785	23.288	449.284	551.389
1	1	77	0	0	21.090	1.299	50.841	538.182	80.170
0	1	138	4.348	0	10.611	2.899	30.824	349.325	205.306
0	1	291	1.031	0.182	9.521	4.467	24.275	509.692	323.515
1	1	29	0	0	26.737	0	37.388	370.153	109.524
0	1	107	3.738	0.280	10.174	6.542	2.969	443.208	581.204
0	1	59	3.390	0	0	3.390	26.699	591.508	422.559
0	1	83	2.410	0.084	10.754	3.614	21.557	277.862	299.803
1	1	77	1.299	0.104	7.662	9.091	6.353	317.309	772.233
1	1	174	0.575	0.098	12.233	5.172	16.631	438.075	374.061
1	1	127	1.575	0.598	18.190	0.787	32.458	278.842	406.684
0	1	145	0.690	0.145	7.949	1.379	36.578	516.274	215.934
0	1	166	1.807	0.452	20.903	4.819	38.406	525.782	186.862
0	1	127	5.512	0.354	5.841	7.874	16.200	586.415	420.607
0	1	83	0	0	22.342	0	36.835	323.206	117.720
0	1	125	0	0.080	2.994	0.800	34.238	361.492	486.668
0	1	99	0	0.101	13.047	1.010	49.499	471.598	325.005
0	1	126	0	0.198	16.750	3.968	47.290	482.313	292.716
1	1	228	0.439	0.013	12.183	2.632	45.700	430.274	264.159
0	1	123	0.813	0.480	18.431	1.626	45.471	530.478	169.035
0	1	172	0.581	0.494	19.597	6.977	45.473	577.369	220.088
0	1	98	0	0.010	14.136	1.020	46.023	436.708	388.265
0	1	147	0.680	0.007	9.807	2.721	39.050	498.468	394.292
0	1	258	1.550	0.023	18.646	2.713	42.270	480.344	455.879
1	1	33	0	0	12.319	6.061	43.032	604.049	133.985
0	1	33	0	0	12.319	6.061	43.032	604.049	133.985
0	1	432	2.083	0.451	7.081	5.556	17.840	367.986	348.381
0	1	164	1.220	0.305	24.260	0.610	51.858	526.453	71.363
0	1	153	0.654	0	7.476	1.961	35.184	747.432	335.477
1	1	111	5.405	2	11.898	5.405	14.557	737.512	290.153
0	1	114	0	0.026	13.479	7.018	21.005	510.964	580.350
0	1	154	1.948	0	5.274	1.948	23.428	396.441	365.409
0	1	90	1.111	0.100	15.099	0	31.945	588.783	341.648
0	1	166	0	0	11.513	3.012	47.202	492.626	292.229
0	1	134	2.985	0.112	10.589	8.955	27.045	430.614	320.602
0	1	92	0	0	17.064	1.087	50.594	393.923	95.450
0	1	88	1.136	0.170	6.662	2.273	27.518	524.247	295.365
1	1	107	0	0	17.432	1.869	60.238	612.510	41.244
0	1	148	0.676	0.932	16.415	3.378	38.250	522.857	138.643
1	1	80	2.500	0	2.484	6.250	10.046	518.262	230.749

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
1	1	142	0	0	20.085	0.704	38.419	266.724	182.616
0	1	157	1.274	0.357	14.535	6.369	31.255	578.711	283.360
0	1	301	0.997	0.033	17.944	2.326	43.364	308.044	179.452
1	1	104	1.923	0.010	0	6.731	3.224	176.517	676.724
0	1	94	4.255	0	9.729	3.191	29.214	483.961	429.729
1	1	128	1.562	0.344	8.977	1.562	29.677	634.291	354.108
0	1	129	0	0.023	19.556	2.326	52.357	435.898	153.375
0	1	214	0	0.005	11.225	2.336	38.896	312.626	274.807
0	1	169	0.592	0.089	9.564	2.367	36.653	386.668	432.164
0	1	360	0.556	0.683	7.704	3.056	28.239	451.603	239.013
0	1	137	0.730	0.708	21.408	4.380	44.212	508.633	313.974
0	1	113	0	0	8.117	3.540	34.583	542.361	434.866
0	1	279	0.717	0.025	13.170	1.434	39.585	446.896	242.972
1	1	144	0.694	0.042	6.446	4.167	43.579	342.249	231.401
1	1	220	1.818	0.018	11.520	2.273	26.333	502.438	341.064
0	1	420	2.143	0.295	10.710	4.286	19.133	455.222	377.565
0	1	166	0.602	0.012	7.207	2.410	31.144	691.187	271.743
0	1	66	0	0.061	11.141	6.061	56.456	717.254	240.101
0	1	288	0.347	0.132	14.569	2.083	51.659	517.144	294.756
0	1	115	0	0.183	18.512	1.739	46.056	437.614	152.434
0	1	171	1.170	0.988	4.646	4.094	23.097	523.706	217.541
0	1	140	0.714	0.386	4.273	4.286	36.805	649.399	163.941
0	1	78	1.282	1.167	12.699	1.282	16.181	511.464	391.764
0	1	188	2.128	0.309	11.330	2.128	36.857	639.293	300.961
1	1	348	0.862	0.537	15.929	4.598	41.142	529.580	321.672
0	1	109	0	0.890	11.875	2.752	60.352	736.515	192.113
0	1	424	0.236	0.033	14.033	1.887	41.978	394.891	235.028
0	1	227	7.048	0.216	8.528	0.881	19.856	328.593	468.043
0	1	144	0	0.014	8.652	3.472	38.732	598.514	155.704
0	1	421	0	0.102	28.465	4.988	32.719	286.908	229.143
0	1	307	0.651	0.143	25.237	2.932	38.077	304.458	177.331
0	1	216	2.315	0.060	9.171	3.704	14.903	457.563	385.142
0	1	115	0	0	12.617	7.826	25.635	316.697	236.828
1	1	54	0	1.352	19.079	5.556	40.516	257.960	275.223
0	1	54	0	0.019	5.716	5.556	37.630	688.686	269.986
0	1	108	0	0.380	12.448	3.704	28.221	278.286	150.861
0	1	162	0	1.056	3.176	3.704	43.119	405.805	280.216
0	1	99	0	0.768	12.185	5.051	29.601	443.808	291.519
0	1	201	0	0.184	6.433	3.483	45.848	577.225	198.083
0	1	160	0.625	0.062	17.621	6.250	27.546	287.931	302.013

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	1	72	0	0	20.003	2.778	44.144	577.114	174.483
0	1	121	2.479	0.760	25.471	10.744	35.143	516.900	443.099
1	1	131	1.527	1.069	8.765	0	32.351	283.688	383.478
0	1	173	0.578	0.012	10.941	2.890	38.234	499.755	235.319
0	1	167	0	0.030	10.250	4.790	47.682	402.622	271.481
1	1	174	0.575	0.431	5.348	3.448	38.638	680.875	366.762
0	1	211	0	0.393	9.964	7.109	29.599	601.459	406.049
0	1	195	0.513	0.154	21.449	2.051	53.396	405.910	322.600
1	1	131	1.527	0.427	10.221	3.817	24.701	507.595	251.751
0	1	231	0.866	0.169	18.974	2.165	38.052	232.806	245.394
1	1	225	0	0.058	10.776	5.333	42.211	360.850	473.210
0	1	143	0	0.084	23.765	2.797	44.455	474.582	240.482
0	1	81	0	0.840	17.456	2.469	41.638	505.264	404.194
1	1	215	1.860	0.153	9.771	0.930	40.641	601.706	95.332
0	1	165	1.212	0.412	6.554	4.242	36.301	396.561	525.210
0	1	146	2.055	0.041	14.486	0.685	45.413	642.675	242.101
0	1	286	1.049	0.524	17.493	2.098	41.917	626.416	185.055
0	1	145	0.690	0.731	10.410	3.448	3.558	175.994	384.431
0	1	151	0	0	13.755	0	58.018	685.195	176.645
0	1	165	1.212	0.139	20.459	7.273	43.389	548.929	286.090
1	1	120	0	0.083	12.161	3.333	54.182	570.955	219.926
1	1	165	0	0.012	12.136	2.424	45.617	419.641	185.939
0	1	161	0	0.646	19.822	3.727	41.161	457.214	155.308
1	1	161	0	1.261	22.449	3.727	41.263	425.102	184.834
1	1	267	1.498	0.341	14.923	3.745	35.402	391.929	347.643
0	1	181	2.210	0.055	4.774	4.420	19.689	626.870	360.464
0	1	114	0.877	0.114	25.146	3.509	48.057	406.307	206.393
0	1	301	0	0.017	22.808	7.973	38.268	578.831	337.381
0	1	186	1.075	0.188	12.678	4.301	40.336	322.175	343.782
0	1	135	0	0.726	13.578	2.222	35.848	450.296	210.333
1	1	178	1.124	0.062	15.200	2.247	39.734	574.758	226.808
0	1	171	0	0.029	16.252	1.754	46.799	696.941	258.089
0	1	293	0	0.191	13.947	1.365	54.771	471.218	101.278
1	1	140	0	0.679	14.319	2.857	44.839	431.266	412.921
0	1	138	0	0.942	13.441	0.725	55.254	396.915	98.554
0	1	105	0	0.476	15.995	0	69.120	584.275	260.978
1	1	555	0.360	0.472	13.644	6.126	32.390	379.635	432.510
0	1	162	0.617	0.352	14.459	4.321	53.138	804.890	202.377
0	1	203	0.493	0.094	11.855	3.941	35.964	337.285	224.765
0	1	171	0	1.070	27.843	2.339	46.947	382.272	134.681

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	1	171	0.585	0.561	12.163	3.509	54.165	737.446	230.407
0	1	270	0	0.296	20.686	5.926	41.166	363.531	222.044
0	1	160	1.875	0.481	19.094	1.250	32.936	363.975	118.162
1	1	183	2.186	0.656	17.169	2.732	37.414	609.527	198.068
0	1	117	1.709	0.590	19.923	0.855	31.907	446.740	158.948
0	1	119	0	0.218	26.869	5.042	36.320	416.742	439.589
0	1	130	0	0	27.058	3.077	41.782	343.453	74.318
0	1	207	1.449	0.430	15.536	0.966	38.461	544.424	211.561
0	1	351	0.285	0.387	12.359	1.425	44.145	460.183	114.262
0	1	164	0.610	0.329	2.748	2.439	43.187	667.849	328.448
0	1	200	2.500	0.140	4.213	4.500	31.248	677.722	288.476
0	1	194	1.546	0.046	10.712	0.515	32.475	318.632	302.828
0	1	132	0.758	1.341	8.912	1.515	44.389	629.219	273.338
0	1	111	11.712	0.811	8.475	0.901	18.812	596.279	565.880
0	1	433	2.540	0.450	7.065	5.774	16.732	368.706	339.449
0	1	144	10.417	0.333	10.659	2.083	3.683	373.333	303.060
0	1	194	2.062	0.005	3.992	6.186	25.839	473.667	377.792
0	1	121	0	0.835	15.367	2.479	43.384	406.604	272.779
0	1	109	0	0	2.592	1.835	43.495	470.471	418.047
0	1	244	1.230	0.094	11.988	5.328	30.232	272.227	459.961
0	1	177	0	0	10.653	1.130	60.334	975.205	167.967
1	1	102	0	0.843	24.086	0.980	33.140	271.311	172.023
0	0	139	0.719	0.043	8.046	2.878	37.350	828.782	243.061
0	0	94	3.191	0.128	11.067	3.191	28.588	480.772	278.553
0	0	86	0	0	6.412	0	30.417	387.125	337.737
1	0	144	0.694	0.062	17.054	4.167	46.910	640.496	202.077
0	0	157	4.459	0.076	12.729	2.548	39.916	652.849	235.967
0	0	109	3.670	0.018	5.979	0	14.305	519.915	518.555
0	0	71	0	0	8.680	0	52.307	483.119	162.522
0	0	244	0	0.102	17.373	4.918	43.063	522.638	270.721
0	0	207	0.966	0.304	21.723	3.382	52.359	404.810	291.337
0	0	193	1.554	0.824	16.791	7.772	34.431	331.225	412.257
0	0	156	0.641	0.526	17.519	3.205	40.980	493.865	275.236
0	0	127	0	0.787	18.387	2.362	51.786	551.735	171.459
0	0	36	0	0	0	11.111	-28.508	129.636	629.140
0	0	115	4.348	0.043	5.954	8.696	7.128	473.904	519.345
0	0	171	1.754	0.573	1.493	5.263	12.547	381.635	418.846
0	0	249	2.410	0.008	6.943	2.410	31.546	478.783	163.983
0	0	245	3.265	0.004	4.474	2.041	12.091	391.678	496.334
0	0	128	2.344	0.406	9.073	4.688	19.911	438.700	280.384

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF density	FASS-ESS density (hex2)	NI score density	EIE score density	IIE score density
0	0	116	0	0	20.121	5.172	35.639	274.024	532.887
0	0	127	0	0.024	22.115	0	46.696	456.797	70.128
0	0	87	0	0	2.774	1.149	51.506	513.624	244.033
0	0	157	0	0	18.098	3.822	38.207	484.916	311.248
0	0	118	0	0	20.186	3.390	56.197	500.579	240.079
0	0	140	1.429	0.207	28.641	3.571	48.874	528.790	225.022
0	0	127	0	0.024	6.629	4.724	21.971	753.591	528.044
0	0	116	0.862	0	6.756	6.897	27.579	625.917	395.815
0	0	78	12.821	0	6.904	1.282	-5.928	441.347	656.418
0	0	110	6.364	0	9.320	2.727	11.521	389.724	320.773
0	0	88	7.955	0	2.232	1.136	17.630	432.607	328.814
0	0	117	1.709	0.034	10.642	3.419	39.217	593.709	307.434
0	0	32	0	0	0	12.500	20.195	769.258	205.247
0	0	197	2.538	0.005	5.385	1.523	28.400	416.637	386.396
0	0	146	4.110	0.712	3.637	1.370	20.446	629.186	218.509
0	0	105	0	0.133	2.317	2.857	11.450	389.503	336.422
0	0	31	0	0.903	0	12.903	4.004	63.061	383.374
1	0	143	2.797	0.685	11.537	1.399	46.862	773.759	210.025
0	0	156	0.641	0.128	5.885	5.769	24.213	470.269	381.649
0	0	71	0	0	18.732	1.408	57.072	458.011	179.215
0	0	110	0	0.027	7.459	0.909	35.249	313.222	339.368
0	0	107	1.869	0.009	3.749	3.738	20.184	393.305	357.387
0	0	78	0	0	18.744	5.128	33.067	503.487	411.153
0	0	49	0	0	34.459	0	87.807	1039.782	78.437
0	0	75	1.333	0.067	11.816	0	54.524	693.888	118.542
0	0	131	3.053	0.527	15.441	3.817	38.038	647.013	294.448
0	0	125	5.600	0.008	5.485	1.600	17.866	610.968	190.666
1	0	193	1.554	0.824	16.791	7.772	34.431	331.225	412.257
1	0	113	0	0	4.042	2.655	31.694	431.735	371.942
0	1	134	0	0.381	6.172	2.239	27.131	409.817	392.647
0	1	116	2.586	1	8.415	4.310	34.348	617.528	294.784
0	1	1702	0.294	0.221	16.812	2.703	43.568	430.464	249.875
0	1	126	0	0.198	18.469	2.381	54.712	525.304	265.967
1	1	642	1.402	0.283	6.858	4.829	20.773	400.452	464.380
0	1	188	4.255	0.660	5.514	6.383	10.868	582.890	402.334
1	1	403	0.744	0.025	12.830	2.978	24.382	211.202	168.542
0	1	111	0	0.072	19.555	6.306	11.667	260.885	256.729
0	1	140	0	0.700	20.359	1.429	51.426	589.922	206.663
0	1	145	4.828	0.007	8.684	3.448	11.732	582.132	354.804
1	1	84	5.952	0.940	3.954	3.571	20.774	279.629	73.252

Test set	Mutation outcome	Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score	FASS-ESS density (hex2)	NI density	EIE score	IIE score
0	1	190	3.158	0.084	7.279	1.053	26.295	379.569	304.161
0	1	251	0.398	0.494	15.054	3.586	39.876	531.306	264.662
1	1	85	1.176	0	3.570	3.529	14.889	359.296	461.700
0	1	148	0	0.527	8.815	1.351	49.934	533.518	124.368
1	1	150	7.333	0.660	5.049	5.333	9.902	434.569	642.587
0	1	159	3.774	0.094	8.401	2.516	21.226	480.723	399.962
0	1	157	1.274	0.357	14.535	7.006	29.749	561.405	266.031
0	1	130	2.308	1.031	6.744	6.154	33.332	530.265	325.733
0	1	650	1.231	0.117	13.024	3.077	45.986	468.264	241.662
0	1	192	1.042	0.917	8.562	2.083	37.190	399.900	371.342
0	1	177	5.650	0.469	2.854	5.085	-6.100	480.882	582.022
0	1	121	0	0.835	15.367	2.479	43.384	406.604	272.779
0	1	170	1.765	0.682	14.365	5.294	36.533	372.658	246.362
0	1	184	0	0.016	14.656	1.630	40.364	467.829	264.397
1	1	279	0.717	0.025	12.287	1.434	39.432	446.896	242.972
0	1	156	1.282	0.449	14.366	5.128	43.947	405.624	244.613
0	1	243	2.881	0.391	7.671	4.938	30.580	354.454	488.037
0	1	123	3.252	0.008	17.308	0.813	18.690	150.243	466.474
0	1	93	0	1.065	24.472	4.301	34.989	410.955	142.974
0	1	237	0	0.097	19.446	1.688	39.207	315.319	164.679
0	1	302	1.325	0.407	9.096	3.311	25.130	341.157	512.821

**Supplementary Table 3. Univariate logistic regression analyses**

		Exon length	PESS density	NNSplice density of 5'ss	SF2/ASF score density	FAS-ESS density (hex2)	NI score density	EIE score density	IIE score density
Before transformation	<i>P</i>	<0.001	0.003	<0.001	<0.001	0.004	<0.001	0.48	0.01
	AIC	502.1	536.8	530.6	534.7	537.5	533.9	545.3	538.2
After transformation	<i>P</i>	<0.001	-	<0.001	<0.001	<0.001	-	-	-
	AIC	498.5	-	519.8	528.5	528.7	-	-	-

**Legend:** *P*, p-value of the likelihood ratio test of the predictor significance. AIC, the Akaike's information criterion (a measure of the goodness of fit of estimated models).

**Supplementary Table 4. Model comparison**

Model	P-value <sup>1</sup>	AIC	Discrimination			
			% of EXSK among $P_{CR-E} \leq 0.5$	% of CR-E among $P_{CR-E} > 0.5$	% of $P_{CR-E} \leq 0.5$ among EXSK events	% of $P_{CR-E} > 0.5$ among CR-E events
<b>Initial model</b>	-	477.41	72.9	65.0	79.0	57.1
<b>Final model</b>	0.83	473.80	72.9	65.5	79.4	57.1
<b>Reduced model</b>	0.57	473.42	71.9	63.8	78.6	55.2
<b>Final model (no transformation)</b>	1.00 <sup>2</sup>	473.07	70.7	62.3	78.1	52.8

**Legend:** Quality of discrimination was evaluated using leave-one-out cross-validation on the training set. Predictors in the initial model:  $\log_e(\text{exon length})$ , PESS density, min(NNSplice density of 5'ss, 0.2), min(SF2/ASF score density, 10), max(FASS-ESS density (hex2), 6.5), NI score density, EIE score density, and IIE score density. Predictors in the final model:  $\log_e(\text{exon length})$ , PESS density, min(NNSplice density of 5'ss, 0.2), min(SF2/ASF score density, 10), max(FASS-ESS density (hex2), 6.5), EIE score density. Predictors in the reduced model:  $\log_e(\text{exon length})$ , PESS density, min(NNSplice density of 5'ss, 0.2), min(SF2/ASF score density, 10), max(FASS-ESS density (hex2), 6.5). Predictors in the final model without transformations: exon length, PESS density, NNSplice density of 5'ss, SF2/ASF score density, FASS-ESS density (hex2), EIE score density. <sup>1</sup>P value of the likelihood ratio test vs. the initial model. <sup>2</sup>, the initial model was without transformation.

**Supplemental Table 5. CRYP-SKIP performance in predicting exon skipping in *RB1***

**Legend:** <sup>1</sup>, exons that were skipped as a result of splicing mutations in *RB1* <sup>1</sup>. <sup>2</sup>, probability of cryptic splice-site activation.

<b><i>RB1</i> exon skipping<sup>1</sup></b>	<b>Pcr-e<sup>2</sup></b>	<b>Exon size (nt)</b>
2	0.408	127
3	0.276	116
6	0.087	68
9	0.044	78
10	0.169	110
12	0.059	88
14	0.074	57
15	0.007	32
16	0.041	77
17	0.326	197
19	0.410	146
21	0.287	105
24	0.007	31
25	0.643	143

**Reference**

- 1 Houdayer C, Dehainault C, Mattler C *et al*: Evaluation of in silico splice tools for decision-making in molecular diagnosis. *Hum Mutat* 2008; **29**: 975-982.