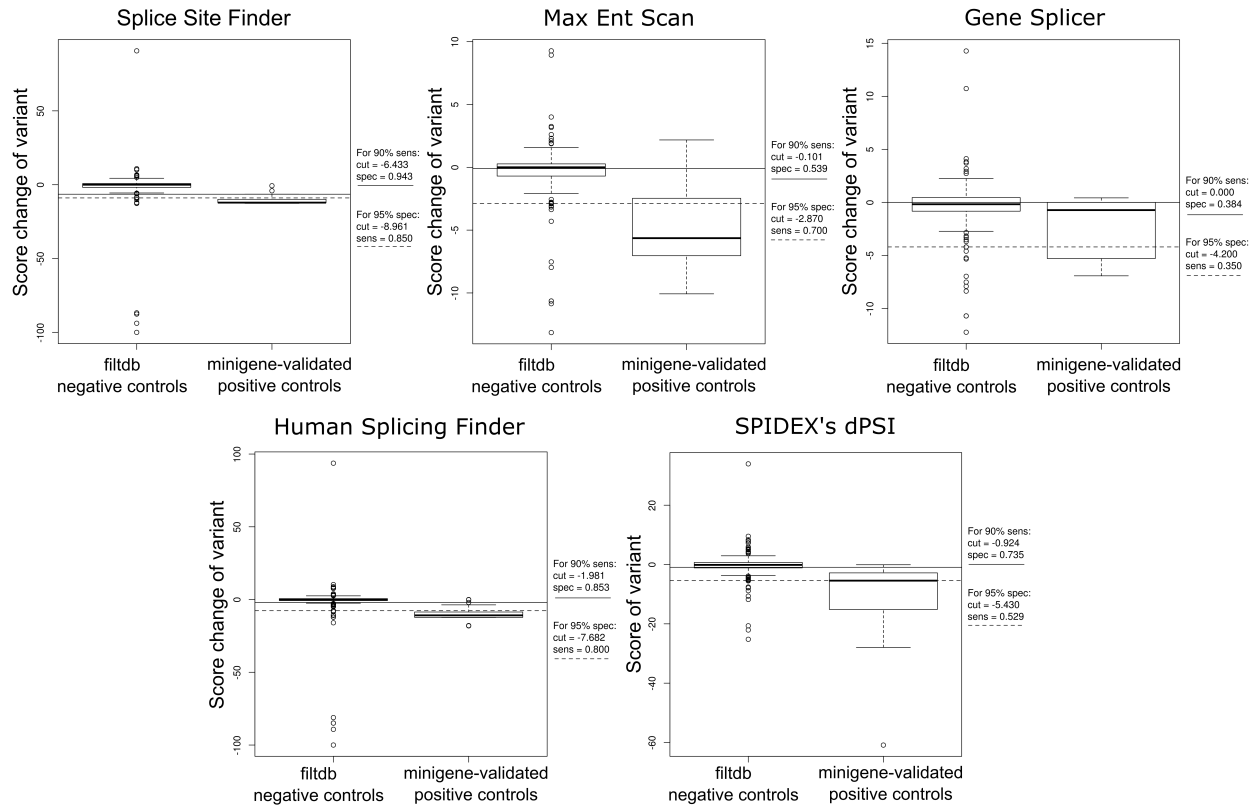


Supporting Figure S1

(a) Flowchart of prioritization scheme for candidate variant minigene functional validation. (b) Schematic of the RHCglo minigene. (c) Schematic of the RHCglo minigene used for testing loss of the first donor splice site of the *RP2* or *SPATA7* genes using upstream cryptic acceptor splice sites.



Supporting Figure S2

Variant score distributions and the corresponding cutoffs needed for 95% specificity and 90% sensitivity for the five splice-affecting variant predictors included in the Figure 4b assessment but not shown in Figure 4a.

Supporting Table S1 – 281 known retinal disease genes that were screened

<i>ABCA4</i>
<i>ABCC6</i>
<i>ABHD12</i>
<i>ACBD5</i>
<i>ADAM9</i>
<i>ADAMTS18</i>
<i>ADGRA3</i>
<i>ADGRV1</i>
<i>ADIPOR1</i>
<i>AGBL5</i>
<i>AHI1</i>
<i>AIPL1</i>
<i>ALMS1</i>
<i>APOB</i>
<i>ARL13B</i>
<i>ARL2BP</i>
<i>ARL3</i>
<i>ARL6</i>
<i>ATF6</i>
<i>ATOH7</i>
<i>ATXN7</i>
<i>BBIP1</i>
<i>BBS1</i>
<i>BBS10</i>
<i>BBS12</i>
<i>BBS2</i>
<i>BBS4</i>
<i>BBS5</i>
<i>BBS7</i>
<i>BBS9</i>
<i>BEST1</i>
<i>C10orf11</i>
<i>C12orf65</i>
<i>C1QTNF5</i>
<i>C21orf2</i>
<i>C2orf71</i>
<i>C8orf37</i>
<i>CA4</i>
<i>CABP4</i>
<i>CACNA1F</i>

<i>CACNA2D4</i>
<i>CAPN5</i>
<i>CC2D2A</i>
<i>CDH23</i>
<i>CDH3</i>
<i>CDHR1</i>
<i>CEP164</i>
<i>CEP250</i>
<i>CEP290</i>
<i>CEP41</i>
<i>CERKL</i>
<i>CFH</i>
<i>CHM</i>
<i>CIB2</i>
<i>CISD2</i>
<i>CLN3</i>
<i>CLN5</i>
<i>CLN6</i>
<i>CLN8</i>
<i>CLRN1</i>
<i>CLUAP1</i>
<i>CNGA1</i>
<i>CNGA3</i>
<i>CNGB1</i>
<i>CNGB3</i>
<i>CNNM4</i>
<i>COL11A1</i>
<i>COL2A1</i>
<i>COL9A1</i>
<i>CRB1</i>
<i>CRX</i>
<i>CSPP1</i>
<i>CTNNA1</i>
<i>CTSD</i>
<i>CYP4V2</i>
<i>DHDDS</i>
<i>DHX38</i>
<i>DMD</i>
<i>DRAM2</i>
<i>DTHD1</i>
<i>EFEMP1</i>

<i>ELOVL4</i>
<i>EMC1</i>
<i>EXOSC2</i>
<i>EYS</i>
<i>FAM161A</i>
<i>FLVCR1</i>
<i>FSCN2</i>
<i>FZD4</i>
<i>GDF6</i>
<i>GNAT1</i>
<i>GNAT2</i>
<i>GNB3</i>
<i>GNPTG</i>
<i>GPR143</i>
<i>GPR179</i>
<i>GRK1</i>
<i>GRM6</i>
<i>GUCA1A</i>
<i>GUCA1B</i>
<i>GUCY2D</i>
<i>HARS</i>
<i>HGSNAT</i>
<i>HK1</i>
<i>HMX1</i>
<i>IDH3B</i>
<i>IFT140</i>
<i>IFT172</i>
<i>IFT27</i>
<i>IMPDH1</i>
<i>IMPG1</i>
<i>IMPG2</i>
<i>INPP5E</i>
<i>INVS</i>
<i>IQCB1</i>
<i>ITM2B</i>
<i>JAG1</i>
<i>KCNJ13</i>
<i>KCNV2</i>
<i>KIAA1549</i>
<i>KIF11</i>
<i>KIF7</i>

<i>KIZ</i>
<i>KLHL7</i>
<i>LAMA1</i>
<i>LCA5</i>
<i>LRAT</i>
<i>LRIT3</i>
<i>LRP5</i>
<i>LZTFL1</i>
<i>MAK</i>
<i>MAPKAPK3</i>
<i>MERTK</i>
<i>MFN2</i>
<i>MFRP</i>
<i>MFSD8</i>
<i>MKKS</i>
<i>MKS1</i>
<i>MTTP</i>
<i>MVK</i>
<i>MYO7A</i>
<i>NBAS</i>
<i>NDP</i>
<i>NEK2</i>
<i>NEUROD1</i>
<i>NMNAT1</i>
<i>NPHP1</i>
<i>NPHP3</i>
<i>NPHP4</i>
<i>NR2E3</i>
<i>NR2F1</i>
<i>NRL</i>
<i>NYX</i>
<i>OAT</i>
<i>OFD1</i>
<i>OPAI</i>
<i>OPA3</i>
<i>OPNILW</i>
<i>OPNIMW</i>
<i>OPNISW</i>
<i>OTX2</i>
<i>PANK2</i>
<i>PAX2</i>

<i>PAX6</i>
<i>PCDH15</i>
<i>PCYT1A</i>
<i>PDE6A</i>
<i>PDE6B</i>
<i>PDE6C</i>
<i>PDE6G</i>
<i>PDE6H</i>
<i>PDZD7</i>
<i>PEX1</i>
<i>PEX10</i>
<i>PEX11B</i>
<i>PEX12</i>
<i>PEX13</i>
<i>PEX14</i>
<i>PEX16</i>
<i>PEX19</i>
<i>PEX2</i>
<i>PEX26</i>
<i>PEX3</i>
<i>PEX5</i>
<i>PEX6</i>
<i>PEX7</i>
<i>PGK1</i>
<i>PHYH</i>
<i>PITPNM3</i>
<i>PLA2G5</i>
<i>PLA2G6</i>
<i>PLK4</i>
<i>PNPLA6</i>
<i>POC1B</i>
<i>POMGNT1</i>
<i>PPT1</i>
<i>PRCD</i>
<i>PRDM13</i>
<i>PROM1</i>
<i>PRPF3</i>
<i>PRPF31</i>
<i>PRPF4</i>
<i>PRPF6</i>
<i>PRPF8</i>

<i>PRPH2</i>
<i>PRPS1</i>
<i>RAB28</i>
<i>RAX2</i>
<i>RB1</i>
<i>RBP3</i>
<i>RBP4</i>
<i>RD3</i>
<i>RDH11</i>
<i>RDH12</i>
<i>RDH5</i>
<i>RGR</i>
<i>RGS9</i>
<i>RGS9BP</i>
<i>RHO</i>
<i>RIMS1</i>
<i>RLBP1</i>
<i>ROM1</i>
<i>RP1</i>
<i>RP2</i>
<i>RP9</i>
<i>RPE65</i>
<i>RPGR</i>
<i>RPGRIP1</i>
<i>RPGRIP1L</i>
<i>RS1</i>
<i>RTN4IP1</i>
<i>SAG</i>
<i>SDCCAG8</i>
<i>SEMA4A</i>
<i>SLC24A1</i>
<i>SLC25A46</i>
<i>SLC38A8</i>
<i>SLC7A14</i>
<i>SNRNP200</i>
<i>SPATA7</i>
<i>SPP2</i>
<i>SRD5A3</i>
<i>TCTN3</i>
<i>TEAD1</i>
<i>TIMM8A</i>

<i>TIMP3</i>
<i>TMEM126A</i>
<i>TMEM138</i>
<i>TMEM216</i>
<i>TMEM231</i>
<i>TMEM237</i>
<i>TMEM67</i>
<i>TOPORS</i>
<i>TPP1</i>
<i>TRAF3IP1</i>
<i>TREX1</i>
<i>TRIM32</i>
<i>TRNT1</i>
<i>TRPM1</i>
<i>TSPAN12</i>
<i>TTC8</i>
<i>TLL5</i>
<i>TTPA</i>
<i>TUB</i>
<i>TUBGCP4</i>
<i>TUBGCP6</i>
<i>TULP1</i>
<i>TYR</i>
<i>UNC119</i>
<i>USH1C</i>
<i>USH1G</i>
<i>USH2A</i>
<i>VCAN</i>
<i>VPS13B</i>
<i>WDPCP</i>
<i>WDR19</i>
<i>WFS1</i>
<i>WHRN</i>
<i>ZNF408</i>
<i>ZNF423</i>
<i>ZNF513</i>

Supporting Table S2 – Raw values from all eight splicing predictors

Manuscript Variant ID	Chrom	hg19 Pos	Ref	Alt	Splice Site Finder Ref Allele Pred.	Splice Site Finder Alt Allele Pred.	Max Ent Scan Ref Allele Pred.	Max Ent Scan Alt Allele Pred.	Gene Splicer Ref Allele Pred.	Gene Splicer Alt Allele Pred.	Human Splicing Finder Ref Allele Pred.	Human Splicing Finder Alt Allele Pred.	NNsplice Ref Allele Pred.	NNsplice Alt Allele Pred.	dbscSNV ada score	dbscSNV rf score	SPIDEX's dPSI
#1	chr14	21802869	G	A	75.895	63.744	9.066	0.911	4.215	0.000	82.911	70.746	0.971	0.146	1.000	0.982	-15.578
#2	chr5	149264037	C	A	67.908	55.515	2.107	0.000	0.000	0.000	76.057	63.740	0.047	0.000	1.000	0.924	-15.144
#3	chr6	135763715	C	A	70.384	57.991	5.906	0.000	0.000	0.000	81.241	68.924	0.499	0.000	1.000	0.964	-3.163
#4	chr16	84070302	C	T	77.422	65.270	10.072	0.000	8.485	2.275	83.176	71.011	0.991	0.863	1.000	0.928	-27.041
#5	chr12	88508350	A	C	79.104	72.671	0.101	0.000	0.000	0.000	82.308	78.649	0.002	0.000	0.986	0.666	-1.189
#6	chr1	216595191	T	A	87.078	77.203	8.623	0.000	0.985	0.000	86.086	78.347	0.970	0.696	1.000	0.844	-60.877
#7	chr14	88903941	G	T	76.896	64.281	6.363	0.000	0.000	0.000	84.411	73.543	0.276	0.011	1.000	0.998	-5.239
#8	chr1	197398744	T	C	76.998	76.302	5.121	7.298	2.630	3.055	79.837	79.692	0.265	0.508	0.090	0.334	-0.080
#9	chr14	21789561	G	A	67.372	55.236	2.827	0.000	2.424	0.000	75.536	64.958	0.562	0.003	1.000	1.000	-5.437
#10	chr1	94496547	C	T	79.074	66.922	9.100	4.291	1.558	0.000	87.862	75.697	0.898	0.314	0.998	0.858	-8.772
#11	chr1	94476351	C	T	80.397	68.245	9.891	4.518	8.055	3.322	85.491	73.326	0.996	0.682	1.000	0.988	-3.217
#12	chr1	68896965	C	A	78.340	65.725	6.624	0.000	0.000	0.000	81.872	71.004	0.973	0.143	1.000	0.940	-1.101
#13	chr2	233635615	G	A	87.607	83.479	8.554	7.274	0.000	0.000	87.682	85.701	0.910	0.562	0.999	0.922	-2.820
#14	chr12	88512415	C	T	97.417	84.770	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	.	-0.924
#15	chrX	38150209	T	A	72.039	62.164	7.085	1.883	0.468	0.000	99.336	81.232	0.875	0.018	1.000	0.926	-11.061
#16	chr1	94473856	G	T	89.450	79.482	10.236	6.237	9.432	3.340	86.852	77.463	0.974	0.703	1.000	0.852	-27.956
#17	chr1	215931934	T	A	82.520	72.644	8.594	2.539	0.000	0.000	99.177	81.278	0.976	0.620	0.982	0.638	-6.321
#21	chrX	46696640	A	C	82.282	72.399	8.993	2.515	10.260	3.335	99.895	81.905	0.889	0.029	0.999	0.890	.
#22	chrX	46696637	G	A	82.282	70.146	8.993	1.160	10.260	4.403	84.795	74.217	0.889	0.009	1.000	0.992	.
#23	chr14	88852181	G	A	79.775	67.639	8.267	0.820	10.520	4.663	84.141	73.563	0.874	0.081	1.000	1.000	.
filtdb negative control	chr1	2337277	C	T	87.283	87.283	13.684	13.457	16.351	15.947	94.664	94.734	0.996	0.995	0.000	0.002	.
filtdb negative control	chr1	5935162	A	T	0.000	90.624	0.000	9.269	0.000	14.274	0.000	93.725	0.000	0.960	.	.	0.749
filtdb negative control	chr1	19561618	T	C	84.497	84.808	9.459	9.985	5.380	4.877	88.860	89.262	0.968	0.976	0.000	0.000	0.872
filtdb negative control	chr1	19568972	A	G	77.753	74.208	5.933	5.477	2.356	1.215	83.402	82.508	0.380	0.182	0.010	0.188	-0.828
filtdb negative control	chr1	40557075	C	T	87.347	87.347	8.704	8.946	5.571	4.809	85.782	85.852	0.993	0.995	0.000	0.002	-0.635
filtdb negative control	chr1	46655158	T	C	68.973	68.973	0.425	0.425	0.000	0.000	82.057	82.057	0.027	0.027	.	.	-1.191
filtdb negative control	chr1	94461754	A	G	85.710	91.886	13.192	13.041	15.676	15.540	87.868	95.550	0.983	0.975	0.000	0.004	7.849
filtdb negative control	chr1	94467407	C	T	78.793	78.793	5.449	5.449	6.466	6.773	83.236	83.236	0.582	0.883	0.000	0.036	-0.035
filtdb negative control	chr1	94473864	C	T	89.450	89.450	10.236	9.830	9.432	8.941	86.852	86.595	0.974	0.976	0.000	0.000	-0.556
filtdb negative control	chr1	103380372	A	G	76.608	73.062	8.204	7.356	6.528	5.280	75.351	74.457	0.856	0.711	0.000	0.056	-2.731

filtdb negative control	chr1	103468295	C	T	81.009	81.009	8.351	8.351	1.334	0.664	85.491	85.491	0.937	0.961	0.000	0.010	-4.447
filtdb negative control	chr1	103468767	A	T	68.297	78.471	4.273	7.525	1.258	4.182	75.577	84.381	0.127	0.918	0.000	0.042	33.935
filtdb negative control	chr1	103496806	A	G	98.688	97.983	10.580	12.043	11.822	11.781	96.824	97.477	0.997	0.997	0.000	0.000	-1.345
filtdb negative control	chr1	103544434	A	G	93.655	92.145	10.555	10.661	3.408	3.022	97.376	97.795	0.997	0.996	0.000	0.030	0.144
filtdb negative control	chr1	111661528	T	C	83.109	83.109	8.614	8.508	3.908	4.963	86.790	86.909	0.790	0.846	0.000	0.004	-0.861
filtdb negative control	chr1	150318872	C	T	95.773	99.060	11.539	11.561	8.606	9.111	93.582	94.836	0.994	0.996	0.017	0.166	2.895
filtdb negative control	chr1	161823011	T	A	83.493	79.702	6.345	5.196	3.102	2.803	82.948	81.241	0.910	0.110	0.015	0.120	-0.974
filtdb negative control	chr1	196696078	T	A	77.220	77.220	6.035	6.035	0.000	0.000	89.668	89.668	0.152	0.228	0.000	0.006	-0.886
filtdb negative control	chr1	196712577	T	C	95.383	92.262	9.258	8.554	9.441	8.125	91.530	90.636	0.984	0.975	0.000	0.028	-3.643
filtdb negative control	chr1	197297540	A	T	87.458	89.912	9.689	10.684	9.010	10.311	84.562	87.913	0.990	0.996	0.000	0.002	0.843
filtdb negative control	chr1	216371934	A	C	89.493	84.328	9.731	8.937	1.817	0.000	83.407	81.478	0.877	0.498	0.003	0.164	-3.664
filtdb negative control	chr2	15616013	C	G	83.187	83.187	9.102	10.403	9.318	11.207	82.757	84.670	0.987	0.994	0.000	0.000	2.587
filtdb negative control	chr2	15676686	G	A	80.945	84.704	8.425	9.380	6.900	7.360	85.532	87.380	0.988	0.993	0.000	0.000	0.566
filtdb negative control	chr2	21227331	G	A	97.550	99.060	10.927	11.422	9.235	10.354	94.840	94.421	0.988	0.992	0.000	0.008	0.928
filtdb negative control	chr2	21238142	C	T	82.337	82.248	8.392	7.521	7.978	7.496	84.257	84.142	0.868	0.761	0.001	0.050	-0.179
filtdb negative control	chr2	21252899	G	A	81.819	85.134	9.545	9.192	7.861	7.996	82.033	83.287	0.991	0.994	0.000	0.000	0.984
filtdb negative control	chr2	21260136	G	A	84.991	87.654	12.012	12.688	9.967	10.523	87.242	88.428	0.998	0.998	0.000	0.018	1.675
filtdb negative control	chr2	27279013	A	G	80.228	80.228	6.708	6.708	2.383	1.713	88.165	88.165	0.853	0.845	0.000	0.002	-0.124
filtdb negative control	chr2	27706816	G	A	83.916	87.230	9.263	9.524	8.930	9.394	88.234	89.488	0.864	0.894	0.000	0.000	4.353
filtdb negative control	chr2	62065851	C	T	91.456	91.456	5.785	4.776	2.625	1.594	91.414	91.157	0.435	0.504	0.157	0.358	0.390
filtdb negative control	chr2	63401973	G	A	82.575	84.678	7.781	7.428	2.419	2.643	85.788	85.135	0.883	0.919	0.000	0.000	-1.813
filtdb negative control	chr2	73761942	C	T	84.995	87.659	9.423	10.247	3.723	4.422	85.121	86.307	0.982	0.990	.	.	8.331
filtdb negative control	chr2	73828310	T	C	85.409	82.094	6.310	5.344	5.459	4.345	86.654	85.400	0.199	0.135	.	.	-2.003
filtdb negative control	chr2	96956561	G	A	88.541	90.350	11.506	11.173	9.733	9.713	87.011	86.399	0.973	0.974	0.000	0.000	2.287
filtdb	chr2	112656372	A	T	92.583	84.072	10.033	8.946	22.005	14.489	97.080	92.330	0.995	0.988	0.088	0.370	.

negative control																	
filtdb negative control	chr2	112705143	A	G	100.000	91.039	10.858	10.749	7.156	4.513	99.999	95.143	0.999	0.998	0.007	0.248	-1.144
filtdb negative control	chr2	112722854	G	A	93.915	81.779	10.218	7.309	11.623	7.023	96.871	86.293	0.999	0.969	1.000	0.962	-1.918
filtdb negative control	chr2	112776979	C	A	75.428	72.964	7.229	6.070	6.304	4.395	78.293	76.225	0.443	0.134	0.017	0.042	-0.280
filtdb negative control	chr2	182414358	T	C	81.582	77.220	8.905	6.035	2.169	0.900	85.860	85.206	0.994	0.890	0.972	0.598	-1.648
filtdb negative control	chr2	182468562	A	C	100.000	0.000	10.858	0.000	5.236	0.000	99.999	0.000	0.998	0.000	1.000	0.926	-20.667
filtdb negative control	chr2	182468818	A	T	99.409	98.465	9.612	8.914	9.036	6.980	97.658	94.307	0.978	0.910	0.000	0.036	-1.493
filtdb negative control	chr2	202498027	T	C	72.148	72.148	3.631	3.631	0.000	0.000	77.792	77.792	0.180	0.358	0.000	0.052	-0.029
filtdb negative control	chr2	239306324	G	A	77.484	87.564	4.407	8.409	8.064	11.776	86.807	95.147	0.597	0.951	0.000	0.040	1.872
filtdb negative control	chr3	97510607	C	T	80.320	82.130	7.341	7.389	2.421	2.669	87.868	87.256	0.817	0.840	0.000	0.000	4.018
filtdb negative control	chr3	129251263	C	T	81.141	81.753	9.402	8.978	10.680	9.748	87.502	87.502	0.956	0.941	0.000	0.002	1.409
filtdb negative control	chr3	132409501	A	G	79.272	77.762	8.252	8.528	4.643	4.869	79.353	79.772	0.968	0.949	0.000	0.000	-1.362
filtdb negative control	chr3	132416206	C	T	78.267	74.356	5.951	4.044	5.038	3.723	80.056	76.926	0.718	0.444	0.759	0.674	-0.169
filtdb negative control	chr3	150658264	G	A	76.515	77.127	8.397	7.635	1.924	1.085	77.924	77.924	0.907	0.699	0.005	0.070	0.709
filtdb negative control	chr3	170198967	G	A	80.435	83.749	7.716	8.218	8.302	9.592	90.823	92.077	0.967	0.975	0.000	0.030	.
filtdb negative control	chr3	193355074	T	C	80.866	80.254	8.789	9.501	2.590	3.510	86.339	86.339	0.951	0.985	0.000	0.002	-2.334
filtdb negative control	chr4	651287	C	T	71.323	71.934	6.485	3.121	7.385	4.656	83.353	83.353	0.547	0.224	0.023	0.224	1.895
filtdb negative control	chr4	6292915	A	G	84.596	84.596	6.323	6.529	7.756	9.518	90.671	90.790	0.910	0.910	0.000	0.000	0.451
filtdb negative control	chr4	15482322	C	T	86.356	88.459	8.777	8.938	9.792	10.183	93.677	93.024	0.865	0.919	0.000	0.000	1.772
filtdb negative control	chr4	15482809	G	A	75.849	75.849	8.569	8.569	5.135	5.135	82.805	82.805	0.989	0.989	0.000	0.000	.
filtdb negative control	chr4	15568992	T	C	82.181	80.371	7.632	7.392	8.123	7.709	84.044	84.656	0.780	0.765	0.000	0.000	-0.808
filtdb negative control	chr4	15982166	A	G	88.601	87.895	8.402	9.973	4.705	5.517	85.841	86.494	0.986	0.987	0.000	0.030	-0.440
filtdb negative control	chr4	15985984	G	C	72.690	71.370	10.259	7.099	10.265	6.572	80.813	77.328	0.896	0.492	0.221	0.446	-3.947
filtdb negative control	chr4	15994019	G	A	89.161	92.706	7.584	8.808	4.590	5.708	90.615	91.509	0.972	0.980	0.000	0.000	2.236
filtdb negative control	chr4	16020162	C	T	77.857	77.857	7.278	6.615	2.718	1.971	78.839	78.668	0.523	0.494	0.000	0.016	-0.077

control																	
filtdb negative control	chr4	16037352	C	T	82.523	82.213	9.064	8.376	3.544	2.949	84.947	84.545	0.847	0.813	0.000	0.010	5.343
filtdb negative control	chr4	39216221	C	T	93.812	93.326	8.767	8.441	3.458	3.090	89.628	89.492	0.911	0.918	0.001	0.022	1.374
filtdb negative control	chr4	39219593	T	C	84.557	81.274	9.293	8.756	7.393	6.859	82.039	81.331	0.986	0.969	0.000	0.010	-0.600
filtdb negative control	chr4	122749436	G	T	81.786	78.870	10.149	9.572	3.871	2.165	77.818	75.721	0.825	0.609	0.001	0.020	-5.519
filtdb negative control	chr4	187122304	C	T	81.165	82.676	7.929	8.016	3.865	3.509	83.835	83.416	0.320	0.500	0.000	0.000	-3.408
filtdb negative control	chr5	82841476	T	C	82.032	82.032	8.846	8.846	4.290	3.628	90.933	90.933	0.981	0.992	0.000	0.002	-0.579
filtdb negative control	chr5	82875800	C	T	81.734	81.734	6.640	7.643	3.583	4.962	80.897	81.742	0.940	0.972	0.000	0.014	-0.299
filtdb negative control	chr5	89938443	A	T	83.666	87.033	10.879	13.181	4.529	8.355	82.649	85.844	0.962	0.988	0.000	0.026	0.144
filtdb negative control	chr5	89938587	C	T	87.557	87.557	9.722	9.722	1.626	1.528	88.467	88.467	0.971	0.984	0.000	0.000	1.535
filtdb negative control	chr5	89940513	C	A	85.599	85.224	8.485	7.953	4.121	3.046	86.936	84.449	0.632	0.173	0.000	0.094	-0.378
filtdb negative control	chr5	89988412	G	A	81.114	81.025	8.034	7.381	2.407	2.132	83.650	83.535	0.939	0.930	0.000	0.018	-0.353
filtdb negative control	chr5	90078934	A	G	0.000	0.000	3.776	3.899	1.041	1.796	89.431	89.385	0.053	0.045	0.000	.	1.153
filtdb negative control	chr5	90087161	C	G	79.951	76.896	7.442	6.363	0.780	0.000	86.171	84.411	0.557	0.510	0.985	0.674	-0.867
filtdb negative control	chr5	90445843	G	T	100.000	100.000	12.160	12.800	11.651	11.201	97.094	97.058	0.997	0.997	0.000	0.008	1.881
filtdb negative control	chr5	90449031	T	C	63.989	62.478	5.746	4.620	1.748	1.128	74.299	74.718	0.005	0.002	0.000	0.052	-2.599
filtdb negative control	chr5	90459600	T	G	90.168	90.168	9.459	7.508	8.106	6.376	90.681	90.081	0.823	0.602	0.004	0.136	.
filtdb negative control	chr5	138221989	G	C	81.829	81.829	6.987	6.987	3.140	2.420	85.508	85.508	0.668	0.505	0.000	0.010	-0.536
filtdb negative control	chr5	140054257	C	T	87.564	87.564	8.409	8.409	8.262	7.573	95.147	95.147	0.925	0.965	0.000	0.002	0.245
filtdb negative control	chr5	178408861	C	T	69.892	69.892	7.143	7.491	9.432	9.257	75.805	75.872	0.628	0.550	0.000	0.038	.
filtdb negative control	chr5	178410234	A	G	86.265	82.950	8.561	7.479	8.736	7.944	90.841	89.587	0.677	0.576	0.002	0.114	-0.193
filtdb negative control	chr5	178415937	A	G	86.820	86.417	10.126	11.453	12.691	14.347	93.136	93.136	0.976	0.991	0.000	0.014	-0.795
filtdb negative control	chr6	42153410	C	T	85.853	85.853	9.477	9.477	7.041	6.543	91.960	91.960	0.964	0.955	0.002	0.032	-0.114
filtdb negative control	chr6	42933526	C	T	85.315	85.315	10.164	9.254	8.947	7.836	92.065	91.894	0.970	0.973	0.003	0.094	0.187
filtdb negative control	chr6	42942779	A	G	83.690	89.867	3.990	5.900	2.697	3.701	82.027	89.709	0.358	0.363	0.000	0.016	-0.781

filtdb negative control	chr6	65016979	A	C	86.346	86.346	13.208	14.325	10.944	12.699	91.019	91.055	0.991	0.989	0.000	0.002	-1.665
filtdb negative control	chr6	65336143	G	A	87.895	89.304	11.254	11.260	10.172	10.239	86.605	87.499	0.996	0.996	0.000	0.000	0.391
filtdb negative control	chr6	65612113	C	T	88.194	84.283	6.556	4.482	2.073	0.000	81.718	78.588	0.812	0.530	0.011	0.128	-1.835
filtdb negative control	chr6	66063513	G	A	91.529	85.352	9.528	8.332	8.027	5.832	90.071	82.389	0.982	0.988	0.000	0.032	-1.665
filtdb negative control	chr6	70981794	A	G	87.814	93.991	10.837	10.980	5.094	5.343	82.252	89.934	0.977	0.968	0.000	0.000	1.472
filtdb negative control	chr6	71010101	A	G	95.313	91.998	11.174	9.415	6.847	5.788	93.889	92.635	0.953	0.941	0.005	0.110	-0.492
filtdb negative control	chr6	76660271	C	T	87.127	87.127	10.098	10.098	10.309	9.514	94.090	94.090	0.914	0.963	0.000	0.000	-0.074
filtdb negative control	chr6	76728584	A	T	90.748	85.138	7.653	6.994	6.864	5.646	89.081	85.863	0.732	0.262	0.015	0.322	-7.582
filtdb negative control	chr6	80198945	T	C	71.160	71.395	7.087	7.015	2.149	1.891	72.524	72.713	0.824	0.826	0.000	0.036	0.656
filtdb negative control	chr6	80202376	C	G	90.758	93.172	9.709	10.232	8.075	9.465	91.796	93.704	0.960	0.973	0.000	0.000	0.440
filtdb negative control	chr6	135777075	A	C	92.749	88.990	4.389	4.225	0.000	0.000	90.036	86.377	0.702	0.283	0.017	0.260	-0.340
filtdb negative control	chr7	33136983	G	A	90.713	93.425	13.553	12.266	11.605	11.937	86.861	88.047	0.997	0.998	0.000	0.002	0.146
filtdb negative control	chr7	33376047	T	C	80.237	78.133	8.424	7.930	7.600	6.486	80.405	81.058	0.937	0.905	0.000	0.014	-0.317
filtdb negative control	chr7	92129162	A	G	91.917	88.840	9.305	9.024	8.907	8.083	88.598	87.890	0.969	0.946	0.000	0.002	-0.687
filtdb negative control	chr7	92147580	C	G	84.274	86.606	9.661	10.247	2.921	3.918	82.076	83.887	0.877	0.940	0.000	0.000	2.297
filtdb negative control	chr7	138566341	C	G	81.782	84.113	10.132	9.851	7.303	7.341	84.420	86.231	0.159	0.357	0.000	0.022	0.664
filtdb negative control	chr8	43054522	C	G	81.732	81.489	9.310	7.745	9.509	8.553	85.536	83.623	0.796	0.429	0.001	0.132	.
filtdb negative control	chr8	63973988	A	C	86.157	86.157	6.645	6.437	2.473	2.743	84.448	84.484	0.754	0.687	0.104	0.192	.
filtdb negative control	chr8	63978657	C	A	86.778	0.000	7.970	0.000	3.171	0.000	81.129	0.000	0.981	0.000	1.000	0.936	-8.828
filtdb negative control	chr8	87680407	A	G	78.204	74.477	7.217	6.725	7.077	6.045	79.327	77.479	0.409	0.231	0.000	0.102	-3.924
filtdb negative control	chr8	94768004	A	T	93.823	0.000	13.155	0.000	12.243	0.000	89.205	0.000	0.997	0.000	1.000	0.930	-22.077
filtdb negative control	chr8	94794620	C	T	91.292	85.115	6.568	5.991	3.736	2.467	88.635	80.953	0.973	0.974	0.000	0.142	-0.125
filtdb negative control	chr8	96276013	G	A	92.304	95.401	11.460	12.353	7.942	8.818	93.292	95.140	0.990	0.994	0.000	0.000	1.952
filtdb negative control	chr8	100493820	C	T	90.888	92.399	10.261	11.101	9.452	10.571	92.059	91.640	0.981	0.988	0.000	0.026	-0.037
filtdb	chr8	100844595	A	T	87.579	0.000	10.642	0.000	10.705	0.000	84.909	0.000	0.996	0.000	1.000	0.914	-4.647

negative control																	
filtdb negative control	chr8	100844596	G	T	87.579	0.000	10.642	0.000	10.705	0.000	84.909	0.000	0.996	0.000	1.000	0.934	-4.970
filtdb negative control	chr8	100844598	A	T	87.579	87.579	10.642	11.228	10.705	11.433	84.909	85.680	0.996	0.997	0.000	0.002	-0.604
filtdb negative control	chr9	103015184	T	C	95.502	91.956	11.340	9.787	9.521	8.499	90.890	89.996	0.847	0.776	0.001	0.056	1.305
filtdb negative control	chr9	116048977	T	C	81.609	79.799	9.217	8.633	7.867	7.609	80.868	81.480	0.923	0.933	0.000	0.012	0.061
filtdb negative control	chr9	139327034	A	G	85.296	85.296	8.226	8.226	9.248	9.216	88.677	88.677	0.883	0.918	.	.	0.754
filtdb negative control	chr9	139327599	G	A	79.778	79.778	8.066	8.066	9.314	9.020	88.326	88.326	0.778	0.703	0.000	0.000	-0.413
filtdb negative control	chr10	27507119	C	T	79.718	79.718	5.095	5.234	3.853	4.569	79.390	79.436	0.294	0.318	0.000	0.000	0.133
filtdb negative control	chr10	55663134	G	A	95.012	95.012	9.813	9.510	7.553	7.526	94.192	93.532	0.865	0.878	0.001	0.010	0.151
filtdb negative control	chr10	55949151	G	A	84.412	84.412	5.545	5.545	6.150	6.150	83.506	83.506	0.894	0.894	0.001	0.034	-2.885
filtdb negative control	chr10	55955444	T	G	84.330	75.416	9.115	8.564	0.647	0.000	87.371	82.621	0.988	0.967	0.994	0.946	-0.937
filtdb negative control	chr10	56077209	G	A	91.272	93.082	12.193	12.750	14.237	14.553	91.432	90.820	0.974	0.974	0.000	0.000	9.524
filtdb negative control	chr10	56287569	T	C	91.182	86.820	11.013	10.126	4.904	4.302	94.128	93.475	0.995	0.987	0.001	0.034	-1.659
filtdb negative control	chr10	71060621	C	T	91.616	91.616	10.065	10.065	2.969	2.969	95.904	95.904	0.997	0.997	0.000	0.000	0.775
filtdb negative control	chr10	71103597	C	G	83.136	83.136	10.751	10.751	16.031	16.377	91.627	91.627	0.987	0.984	.	.	0.761
filtdb negative control	chr10	71129194	C	T	87.167	80.990	7.963	8.710	9.205	7.938	89.514	81.832	0.882	0.922	0.000	0.024	-1.180
filtdb negative control	chr10	71136851	T	C	77.477	71.698	6.842	5.002	7.913	0.000	80.127	77.953	0.911	0.345	0.975	0.738	-0.210
filtdb negative control	chr10	73490214	C	T	78.699	82.014	8.921	10.120	10.334	11.406	88.763	90.017	0.914	0.933	0.000	0.000	0.485
filtdb negative control	chr10	73544638	A	G	73.481	73.741	6.475	6.169	9.210	9.389	81.221	81.336	0.591	0.745	0.000	0.002	-3.727
filtdb negative control	chr10	73570334	G	A	86.723	86.723	10.898	10.898	10.734	10.217	94.090	94.090	0.993	0.994	0.000	0.000	-0.066
filtdb negative control	chr10	85956412	G	A	81.753	81.443	8.978	8.549	4.290	4.298	87.502	87.100	0.922	0.920	0.001	0.042	-0.277
filtdb negative control	chr10	85965574	C	T	87.171	89.883	6.908	7.611	3.521	4.243	91.002	92.188	0.862	0.906	0.000	0.000	2.319
filtdb negative control	chr10	94409749	T	C	78.934	73.156	6.889	4.807	0.957	0.557	83.084	80.910	0.956	0.892	0.056	0.346	-0.849
filtdb negative control	chr10	95395245	C	T	90.281	92.992	9.828	8.985	4.129	4.367	87.038	88.224	0.863	0.938	0.000	0.002	-0.343
filtdb negative control	chr10	95395247	A	G	90.281	90.281	9.828	9.437	4.129	3.825	87.038	86.992	0.863	0.841	0.000	0.000	0.264

control																	
filtdb negative control	chr10	97447487	T	A	55.879	62.550	3.895	4.845	0.000	0.000	69.822	73.738	0.000	0.002	0.572	0.624	0.563
filtdb negative control	chr10	102783678	T	C	94.221	94.221	9.884	9.884	9.199	9.712	97.825	97.825	0.998	0.994	0.000	0.000	-0.730
filtdb negative control	chr11	6636668	C	T	89.215	77.063	10.655	7.794	8.264	4.743	91.195	79.030	0.998	0.937	0.378	0.310	-2.274
filtdb negative control	chr11	12903443	C	T	83.701	83.215	9.536	9.837	8.592	8.593	88.773	88.637	0.839	0.875	.	.	-0.088
filtdb negative control	chr11	17517235	A	G	77.185	73.084	5.621	4.923	5.339	0.000	77.261	75.413	0.527	0.479	0.001	0.074	-3.460
filtdb negative control	chr11	17526255	A	G	87.768	84.041	9.275	9.588	9.184	8.582	87.588	85.740	0.911	0.897	0.000	0.026	-4.453
filtdb negative control	chr11	17526256	A	G	87.768	84.481	9.275	8.901	9.184	8.585	87.588	86.334	0.911	0.871	0.000	0.000	-5.458
filtdb negative control	chr11	17542553	C	T	77.105	77.105	7.533	6.779	0.000	0.000	83.792	83.603	0.480	0.446	0.000	0.060	-0.541
filtdb negative control	chr11	31815362	G	A	83.669	86.984	8.698	9.109	8.380	9.439	90.125	91.379	0.937	0.945	0.000	0.000	0.551
filtdb negative control	chr11	61161357	T	G	92.658	92.658	8.572	6.621	5.771	4.041	88.996	88.396	0.945	0.845	0.001	0.036	-1.650
filtdb negative control	chr11	61165732	G	C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	.	.	-11.784
filtdb negative control	chr11	61722571	A	C	75.916	76.921	7.450	8.474	8.025	9.738	90.663	93.267	0.864	0.971	0.000	0.002	0.542
filtdb negative control	chr11	66288733	G	C	91.932	92.594	10.224	11.306	8.157	9.515	90.787	93.328	0.974	0.989	0.000	0.002	8.243
filtdb negative control	chr11	67223920	C	G	66.013	66.013	0.000	0.000	4.527	6.049	77.887	77.887	0.012	0.007	0.000	.	2.941
filtdb negative control	chr11	67223921	A	C	66.013	66.013	0.000	0.000	4.527	5.958	77.887	77.887	0.012	0.037	0.000	.	-0.296
filtdb negative control	chr11	67226097	C	T	84.533	88.079	13.123	12.396	11.349	10.443	91.108	92.002	0.975	0.978	0.000	0.006	-0.718
filtdb negative control	chr11	68133035	T	C	82.095	82.095	8.007	8.172	8.228	8.732	84.884	85.544	0.847	0.850	0.000	0.000	-0.352
filtdb negative control	chr11	68154188	G	A	82.656	82.656	7.826	7.826	9.083	8.634	91.048	91.048	0.983	0.967	0.000	0.000	0.028
filtdb negative control	chr11	68177614	T	C	87.985	82.206	9.652	7.790	6.632	5.802	93.383	91.209	0.997	0.994	0.002	0.038	-0.385
filtdb negative control	chr11	76804729	G	A	84.478	84.478	11.990	12.070	14.787	15.104	94.363	94.192	0.991	0.991	0.000	0.052	0.885
filtdb negative control	chr11	76833763	G	C	89.859	77.163	9.602	6.539	18.071	9.704	96.666	84.653	0.990	0.327	0.537	0.256	-25.209
filtdb negative control	chr11	76866948	C	T	81.490	85.036	10.478	8.840	9.571	9.058	87.601	88.495	0.801	0.817	0.000	0.002	5.076
filtdb negative control	chr11	76867135	C	T	79.778	75.650	8.066	5.262	6.723	2.524	88.326	86.345	0.755	0.465	0.992	0.874	-2.414
filtdb negative control	chr11	76867903	C	T	79.067	82.613	8.312	8.140	6.619	6.048	87.954	88.848	0.157	0.322	0.000	0.006	0.679

filtdb negative control	chr11	76872169	G	A	71.500	71.500	10.051	10.051	4.165	4.501	77.249	77.249	0.943	0.919	0.000	0.000	0.586
filtdb negative control	chr11	76914106	C	G	79.171	79.171	5.145	4.966	3.979	4.271	84.247	84.492	0.343	0.385	0.000	0.006	-0.416
filtdb negative control	chr11	76918322	T	C	82.339	79.024	6.713	6.075	3.289	2.380	92.057	90.803	0.810	0.756	0.000	0.010	-2.830
filtdb negative control	chr11	76919468	A	T	72.873	77.781	5.453	8.627	1.771	5.891	90.183	92.338	0.773	0.928	0.000	0.008	1.558
filtdb negative control	chr11	76922186	G	C	89.966	89.966	10.369	11.160	11.861	12.571	88.941	90.752	0.473	0.713	0.006	0.062	0.520
filtdb negative control	chr11	117261488	C	G	82.325	82.034	9.453	9.258	6.998	4.471	89.739	87.007	0.939	0.809	0.001	0.070	-1.538
filtdb negative control	chr11	119215586	C	T	83.669	86.417	10.494	11.453	6.764	7.470	92.330	93.136	0.971	0.989	0.000	0.002	0.024
filtdb negative control	chr12	1902929	C	T	86.715	86.715	9.915	9.697	12.030	11.411	88.580	88.650	0.825	0.853	0.000	0.000	.
filtdb negative control	chr12	1902933	C	T	86.715	86.715	9.915	8.678	12.030	11.706	88.580	88.517	0.825	0.710	0.003	0.148	.
filtdb negative control	chr12	48376869	T	C	86.370	86.370	9.253	9.253	10.733	10.323	93.030	93.030	0.991	0.987	0.000	0.000	1.779
filtdb negative control	chr12	48380682	G	A	82.573	86.332	9.386	9.881	8.212	8.667	85.295	87.143	0.502	0.765	0.000	0.000	4.920
filtdb negative control	chr12	48389709	C	T	86.101	86.152	9.204	9.294	9.347	10.695	88.392	88.438	0.761	0.722	0.000	0.022	-0.600
filtdb negative control	chr12	88532978	T	A	65.745	72.006	3.800	5.214	0.000	0.000	69.298	72.493	0.001	0.024	0.000	0.046	4.417
filtdb negative control	chr12	89853408	G	A	78.643	78.643	9.491	9.491	0.799	1.155	83.717	83.717	0.968	0.966	0.000	0.000	0.281
filtdb negative control	chr12	110017759	C	T	82.409	82.409	6.142	6.142	1.749	1.456	88.276	88.276	0.939	0.899	0.000	0.000	0.695
filtdb negative control	chr13	49051481	T	A	91.125	85.103	7.004	5.709	2.274	0.000	88.070	84.875	0.889	0.368	0.001	0.062	-2.649
filtdb negative control	chr13	77566414	C	T	83.502	83.502	9.095	9.095	13.065	12.750	88.262	88.262	0.985	0.982	0.000	0.002	.
filtdb negative control	chr13	114323997	T	C	90.765	87.219	9.904	8.498	5.359	3.331	92.490	91.596	0.929	0.920	0.000	0.002	-0.085
filtdb negative control	chr14	21793236	G	A	87.361	87.361	10.472	10.472	8.590	8.982	93.268	93.268	0.995	0.995	0.000	0.002	0.846
filtdb negative control	chr14	21796784	G	C	91.616	94.671	10.065	10.766	1.213	2.215	95.904	97.664	0.999	0.999	0.000	0.018	0.203
filtdb negative control	chr14	21811196	A	G	93.769	93.769	8.727	8.512	6.455	6.463	92.755	92.926	0.949	0.941	0.000	0.030	-0.018
filtdb negative control	chr14	76232398	T	C	80.847	79.336	3.589	3.008	2.370	1.657	77.946	78.365	0.620	0.437	0.000	0.140	-0.303
filtdb negative control	chr14	76238203	G	C	86.164	85.404	9.332	9.256	6.281	6.379	92.362	92.121	0.993	0.996	0.000	0.016	0.055
filtdb negative control	chr14	76245906	T	C	84.261	80.946	10.093	9.978	6.004	5.348	88.663	87.409	0.907	0.867	0.142	0.380	-0.549
filtdb	chr14	89343626	T	C	94.114	90.799	9.733	9.799	11.331	10.255	90.648	89.394	0.991	0.987	0.000	0.002	.

negative control																	
filtdb negative control	chr15	31369123	A	G	87.849	87.849	8.764	8.764	0.847	1.243	87.834	87.834	0.935	0.935	.	.	5.104
filtdb negative control	chr15	72105923	G	A	87.304	87.304	8.626	8.626	5.049	4.892	87.986	87.986	0.962	0.962	.	.	.
filtdb negative control	chr15	73002035	G	A	64.055	64.055	1.219	1.491	0.000	0.000	76.347	76.414	0.001	0.001	0.000	0.008	3.722
filtdb negative control	chr15	90172600	G	A	86.804	92.583	8.703	10.033	13.775	16.503	94.906	97.080	0.995	0.996	0.000	0.004	-1.560
filtdb negative control	chr15	90190947	T	C	80.155	80.155	9.746	9.860	9.962	10.565	84.794	84.724	0.990	0.985	0.000	0.000	-0.372
filtdb negative control	chr16	1411805	G	T	82.327	82.327	9.298	9.298	9.480	8.003	87.827	87.827	0.990	0.984	0.000	0.008	0.180
filtdb negative control	chr16	1639793	C	G	84.891	87.523	8.024	9.337	8.711	10.199	92.386	94.294	0.933	0.964	0.000	0.000	0.063
filtdb negative control	chr16	3558283	A	T	66.750	72.538	6.371	6.249	1.262	2.229	74.897	77.662	0.020	0.283	0.001	0.048	7.311
filtdb negative control	chr16	3580565	T	C	82.210	88.387	10.464	10.695	12.248	12.091	84.382	92.064	0.779	0.716	0.000	0.038	0.378
filtdb negative control	chr16	16291871	G	C	84.048	84.048	9.369	9.369	8.042	8.783	89.021	89.021	0.948	0.920	0.000	0.000	0.432
filtdb negative control	chr16	16302586	T	C	96.945	87.985	11.079	9.652	7.570	3.360	98.239	93.383	0.997	0.994	0.008	0.154	-1.283
filtdb negative control	chr16	16313545	C	T	85.935	85.935	8.383	8.983	1.972	1.620	91.601	91.668	0.719	0.627	0.003	0.628	-0.875
filtdb negative control	chr16	49525224	G	A	86.568	89.280	11.631	11.816	17.037	18.337	88.291	89.477	0.986	0.991	0.929	0.754	.
filtdb negative control	chr16	56532346	T	C	79.534	75.171	8.734	4.437	0.000	0.000	97.714	81.736	0.518	0.018	0.991	0.838	-5.172
filtdb negative control	chr16	57921752	A	G	82.589	82.589	9.429	9.429	8.617	9.063	85.749	85.749	0.913	0.944	0.000	0.000	-0.042
filtdb negative control	chr16	57935426	G	A	71.285	77.063	7.290	7.794	10.303	10.679	76.856	79.030	0.941	0.959	0.000	0.000	-0.336
filtdb negative control	chr16	57937895	G	A	77.241	80.524	9.056	9.463	9.138	9.486	91.556	92.264	0.943	0.960	0.000	0.004	0.168
filtdb negative control	chr16	57949251	G	A	72.926	76.241	5.120	5.475	0.000	2.000	83.011	84.265	0.105	0.153	0.000	0.000	5.073
filtdb negative control	chr16	57954448	A	G	79.213	79.699	6.226	6.993	4.445	4.444	86.615	86.751	0.224	0.195	0.000	0.054	0.113
filtdb negative control	chr16	57965793	G	T	81.653	81.653	11.372	10.030	16.981	15.355	89.312	87.244	0.959	0.935	0.001	0.060	-7.864
filtdb negative control	chr16	57994737	G	C	86.804	86.804	8.703	8.703	8.705	9.307	94.906	94.906	0.991	0.984	0.000	0.000	-0.556
filtdb negative control	chr16	72133789	G	A	87.564	91.927	8.409	10.284	9.509	9.319	91.869	92.523	0.982	0.998	0.000	0.016	2.360
filtdb negative control	chr16	75579242	G	C	81.053	81.053	7.688	7.688	5.027	5.169	85.697	85.697	0.985	0.964	0.000	0.002	0.123
filtdb negative control	chr16	75579247	T	C	81.053	76.691	7.688	5.128	5.027	3.921	78.584	77.931	0.985	0.880	0.190	0.318	-3.449

control																	
filtdb negative control	chr16	77323312	C	T	84.538	84.538	10.098	9.868	10.072	9.488	88.216	88.286	0.952	0.968	0.000	0.000	4.062
filtdb negative control	chr16	77393207	G	C	87.864	87.864	10.077	10.077	4.626	4.134	89.421	89.421	0.995	0.990	0.000	0.000	0.069
filtdb negative control	chr16	77398081	T	C	85.404	75.323	9.256	7.417	7.351	5.522	92.121	83.781	0.996	0.691	0.136	0.188	-0.650
filtdb negative control	chr16	84070510	G	A	87.542	91.087	12.724	12.239	14.309	14.049	94.963	95.857	0.996	0.994	0.000	0.000	5.930
filtdb negative control	chr16	84070514	A	C	87.542	84.640	12.724	10.824	14.309	12.146	94.963	91.864	0.996	0.988	0.000	0.022	-4.287
filtdb negative control	chr17	1576369	C	T	71.738	71.428	8.043	6.825	11.466	11.063	76.143	75.741	0.923	0.926	0.000	0.002	-0.852
filtdb negative control	chr17	1582714	T	C	95.644	95.644	7.704	8.817	4.787	5.527	95.123	95.238	0.956	0.956	0.000	0.000	0.246
filtdb negative control	chr17	1586998	G	A	0.000	0.000	2.668	2.358	0.000	0.000	87.342	79.660	0.359	0.423	0.015	.	0.122
filtdb negative control	chr17	6331836	T	G	84.032	84.032	9.470	11.581	7.955	10.204	90.428	92.915	0.867	0.963	0.000	0.002	7.301
filtdb negative control	chr17	6364881	T	C	80.822	80.822	6.438	5.589	4.793	4.014	88.883	88.815	0.709	0.792	0.000	0.012	-0.257
filtdb negative control	chr17	6373737	C	T	75.569	75.569	8.488	8.904	8.527	9.495	85.154	85.035	0.420	0.397	0.000	0.002	0.039
filtdb negative control	chr17	6380543	C	G	72.219	74.661	8.138	8.998	8.157	4.851	79.755	82.127	0.177	0.603	0.000	0.000	2.425
filtdb negative control	chr17	7918177	G	T	74.907	68.663	10.742	7.960	11.089	8.243	82.850	78.554	0.704	0.245	0.735	0.824	-0.465
filtdb negative control	chr17	7919238	G	T	69.924	72.641	4.438	7.042	5.005	8.188	84.291	86.492	0.646	0.903	0.000	0.008	0.982
filtdb negative control	chr17	7919754	C	T	85.334	86.845	13.015	12.411	10.544	10.929	94.915	94.496	0.973	0.981	0.000	0.000	-3.248
filtdb negative control	chr17	36489291	C	T	72.834	72.834	6.622	6.413	6.694	6.823	84.620	84.363	0.178	0.085	0.000	0.102	-0.322
filtdb negative control	chr18	6966296	G	A	87.845	87.359	9.281	8.388	11.914	11.593	89.199	89.063	0.979	0.979	0.001	0.046	-0.007
filtdb negative control	chr18	6977719	A	G	69.980	69.980	7.000	7.000	3.268	3.754	81.241	81.241	0.527	0.715	0.000	0.006	-1.109
filtdb negative control	chr18	7011490	A	G	81.706	78.392	10.384	10.288	9.107	8.971	81.136	79.882	0.930	0.910	0.000	0.002	-2.044
filtdb negative control	chr18	7015714	T	C	89.859	89.859	9.602	9.602	7.086	8.035	96.666	96.666	0.995	0.992	0.000	0.000	0.081
filtdb negative control	chr19	3770965	G	A	83.392	85.202	11.329	11.959	13.806	13.978	91.163	90.551	0.974	0.972	0.000	0.006	.
filtdb negative control	chr19	7607441	C	T	85.285	87.388	9.996	9.423	10.202	9.713	90.274	89.621	0.870	0.924	0.000	0.000	0.348
filtdb negative control	chr19	7607564	T	C	86.021	86.021	10.169	10.169	11.804	12.718	93.210	93.210	0.986	0.995	0.000	0.002	-0.303
filtdb negative control	chr19	54632423	T	C	76.195	73.483	11.082	10.965	11.039	10.484	86.448	85.262	0.989	0.981	0.000	0.006	-0.329

filtdb negative control	chr20	2644407	C	G	73.348	84.171	0.000	8.928	2.027	12.757	77.213	87.509	0.005	0.931	0.000	.	5.745
filtdb negative control	chr20	21126194	C	G	84.044	81.363	6.883	5.893	3.743	2.841	79.805	77.897	0.935	0.868	.	.	-2.795
filtdb negative control	chr20	21186155	G	A	88.098	88.098	9.795	9.795	7.133	6.735	81.160	81.160	0.994	0.994	.	.	-1.940
filtdb negative control	chr20	21186155	G	T	88.098	88.098	9.795	9.795	7.133	6.480	81.160	81.160	0.994	0.994	.	.	-3.931
filtdb negative control	chr20	21186159	C	T	88.098	88.098	9.795	9.795	7.133	7.087	81.160	81.160	0.994	0.994	.	.	-4.501
filtdb negative control	chr20	21186160	G	A	88.098	88.098	9.795	9.795	7.133	6.673	81.160	81.160	0.994	0.994	.	.	-5.430
filtdb negative control	chr20	34095686	C	G	86.804	87.564	8.703	8.409	10.729	9.771	94.906	95.147	0.885	0.763	0.001	0.170	2.499
filtdb negative control	chr20	34099182	T	C	85.321	82.038	11.215	10.914	15.870	14.199	90.243	89.535	0.964	0.952	0.000	0.000	.
filtdb negative control	chr20	34099183	G	C	85.321	85.854	11.215	12.240	15.870	17.709	90.243	92.156	0.964	0.981	0.000	0.002	.
filtdb negative control	chr20	62612675	G	A	78.603	78.293	5.505	4.744	8.469	7.553	90.291	89.889	0.522	0.403	0.001	0.212	.
filtdb negative control	chr21	45750346	C	A	81.203	68.588	7.528	0.000	8.438	1.469	90.225	79.357	0.808	0.009	0.000	0.000	-10.667
filtdb negative control	chrX	31893307	T	G	84.901	84.901	9.461	9.461	1.025	1.025	89.726	89.726	0.929	0.929	0.068	0.496	2.064
filtdb negative control	chrX	32503227	G	C	77.519	75.188	4.629	4.788	3.556	2.729	86.000	84.189	0.134	0.047	0.000	0.086	-0.210
filtdb negative control	chrX	49075777	C	T	77.244	81.606	5.031	5.613	7.452	8.559	78.987	79.641	0.845	0.985	0.000	0.006	0.677
filtdb negative control	chrX	49084492	C	T	77.530	77.220	6.745	6.035	0.000	0.000	90.070	89.668	0.119	0.107	0.000	0.016	0.166
filtdb negative control	chrX	85226596	G	C	84.497	84.497	9.459	9.459	0.000	0.000	88.860	88.860	0.974	0.974	0.000	0.000	.