

Table S2. SNVs and indels identified across 266 MDS genomes.

Sample_ID	Position	REF	ALT	GENE	AA_Change	Type
MDS051	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS129	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS151	chr1:115256530	G	T	NRAS	p.Q61K	missense
MDS164	chr1:115258748	C	A	NRAS	p.G12C	missense
MDS173	chr1:115256538	G	A	NRAS	p.T58I	missense
MDS177	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS210B	chr1:115256530	G	T	NRAS	p.Q61K	missense
MDS285B	chr1:115258744	C	T	NRAS	p.G13D	missense
MDS285B	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS348B	chr1:115256529	T	C	NRAS	p.Q61R	missense
MDS366B	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS373B	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS395B	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS435B	chr1:115258747	C	T	NRAS	p.G12D	missense
MDS036	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS051	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS058	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS106	chr2:25457291	T	C	DNMT3A	.	splicing
MDS107	chr2:25536826	C	T	DNMT3A	p.G10R	missense
MDS164	chr2:25463289	T	C	DNMT3A	p.Y735C	missense
MDS170	chr2:25463247	C	T	DNMT3A	p.R749H	missense
MDS213B	chr2:25463286	C	T	DNMT3A	p.R736H	missense
MDS213B	chr2:25466799	C	T	DNMT3A	p.R635Q	missense
MDS226B	chr2:25464534	T	C	DNMT3A	p.Y660C	missense
MDS226B	chr2:25467481	C	A	DNMT3A	p.G532V	missense
MDS247B	chr2:25457243	G	A	DNMT3A	p.R882C	missense
MDS258B	chr2:25457173	A	C	DNMT3A	p.L905R	missense
MDS278B	chr2:25458669	G	A	DNMT3A	p.T835M	missense
MDS278B	chr2:25463184	G	A	DNMT3A	p.S770L	missense
MDS343B	chr2:25463508	C	T	DNMT3A	.	splicing
MDS343B	chr2:25464522	T	A	DNMT3A	p.E664V	missense
MDS351B	chr2:25471048	TTC	T	DNMT3A	.	frameshift
MDS361B	chr2:25472555	C	A	DNMT3A	p.D15Y	missense
MDS362B	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS372B	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS385B	chr2:25471064	G	C	DNMT3A	p.P233A	missense
MDS386B	chr2:25466800	G	A	DNMT3A	p.R635W	missense
MDS401B	chr2:25464481	G	A	DNMT3A	p.Q678X	nonsense
MDS401B	chr2:25467023	C	T	DNMT3A	.	splicing
MDS407B	chr2:25467188	C	T	DNMT3A	p.V563M	missense
MDS419B	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS432B	chr2:25457242	C	T	DNMT3A	p.R882H	missense
MDS440B	chr2:25471019	G	A	DNMT3A	p.Q248X	nonsense

MDS029	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS037	chr2:198267360	T	A	SF3B1	p.K666M	missense
MDS109	chr2:198265605	G	C	SF3B1	p.S851C	missense
MDS110	chr2:198267360	T	G	SF3B1	p.K666T	missense
MDS156	chr2:198267360	T	G	SF3B1	p.K666T	missense
MDS161	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS166	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS200B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS209B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS213B	chr2:198267359	C	G	SF3B1	p.K666N	missense
MDS213B	chr2:198267535	T	G	SF3B1	p.T608P	missense
MDS226B	chr2:198266822	T	A	SF3B1	p.I704F	missense
MDS226B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS228B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS239B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS249B	chr2:198266501	A	G	SF3B1	p.S779P	missense
MDS250B	chr2:198267359	C	A	SF3B1	p.K666N	missense
MDS252B	chr2:198266489	C	T	SF3B1	p.E783K	missense
MDS252B	chr2:198273210	T	C	SF3B1	p.R334G	missense
MDS257B	chr2:198267484	G	A	SF3B1	p.R625C	missense
MDS258B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS273B	chr2:198267361	T	C	SF3B1	p.K666E	missense
MDS278B	chr2:198273210	T	C	SF3B1	p.R334G	missense
MDS306B	chr2:198266831	C	A	SF3B1	p.V701F	missense
MDS314B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS322B	chr2:198266713	C	T	SF3B1	p.G740E	missense
MDS356B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS373B	chr2:198265476	T	G	SF3B1	p.D894A	missense
MDS403B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS419B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS424B	chr2:198266834	T	C	SF3B1	p.K700E	missense
MDS170	chr2:209113113	G	A	IDH1	p.R132C	missense
MDS200B	chr2:209108317	C	T	IDH1	p.V178I	missense
MDS247B	chr2:209113113	G	A	IDH1	p.R132C	missense
MDS309B	chr2:209113128	G	A	IDH1	p.P127S	missense
MDS328B	chr2:209113113	G	A	IDH1	p.R132C	missense
MDS334B	chr2:209113113	G	A	IDH1	p.R132C	missense
MDS340B	chr2:209113112	C	T	IDH1	p.R132H	missense
MDS439B	chr2:209116217	C	T	IDH1	p.R20Q	missense
MDS028	chr4:106157703	T	G	TET2	p.F868L	missense
MDS041	chr4:106157600	G	A	TET2	p.C834Y	missense
MDS045	chr4:106180862	G	A	TET2	p.G1297E	missense
MDS046	chr4:106157703	T	G	TET2	p.F868L	missense
MDS046	chr4:106197401	C	G	TET2	p.H1912D	missense
MDS058	chr4:106196613	A	C	TET2	p.Y1649S	missense
MDS059	chr4:106193892	C	T	TET2	p.R1452X	nonsense

MDS106	chr4:106197207	G	A	TET2	p.W1847X	nonsense
MDS129	chr4:106196529	T	C	TET2	p.L1621P	missense
MDS129	chr4:106155582	A	T	TET2	p.K161N	missense
MDS134	chr4:106157703	T	G	TET2	p.F868L	missense
MDS141	chr4:106157703	T	G	TET2	p.F868L	missense
MDS151	chr4:106196529	T	C	TET2	p.L1621P	missense
MDS154	chr4:106156616	G	A	TET2	p.R506K	missense
MDS167	chr4:106155928	G	A	TET2	p.A277T	missense
MDS167	chr4:106196297	C	A	TET2	p.P1544T	missense
MDS177	chr4:106190781	CAG	C	TET2	.	frameshift
MDS181	chr4:106157703	T	G	TET2	p.F868L	missense
MDS185	chr4:106157703	T	G	TET2	p.F868L	missense
MDS185	chr4:106196238	A	T	TET2	p.Q1524L	missense
MDS185	chr4:106197654	G	T	TET2	p.G1996V	missense
MDS210B	chr4:106158550	G	T	TET2	p.E1151X	nonsense
MDS212B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS223B	chr4:106193753	AT	A	TET2	.	frameshift
MDS242B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS247B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS256B	chr4:106157802	T	G	TET2	p.N901K	missense
MDS257B	chr4:106156616	G	A	TET2	p.R506K	missense
MDS258B	chr4:106157969	T	A	TET2	p.L957X	nonsense
MDS258B	chr4:106196820	TA	T	TET2	.	frameshift
MDS260B	chr4:106157539	C	T	TET2	p.R814C	missense
MDS267B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS278B	chr4:106197564	G	A	TET2	p.R1966H	missense
MDS315B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS320B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS328B	chr4:106158352	AC	A	TET2	.	frameshift
MDS331B	chr4:106196285	C	T	TET2	p.Q1540X	nonsense
MDS332B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS343B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS343B	chr4:106180900	A	T	TET2	p.K1310X	nonsense
MDS365B	chr4:106180838	G	T	TET2	p.C1289F	missense
MDS366B	chr4:106157532	TATAAATCG	T	TET2	.	frameshift
MDS370B	chr4:106157539	C	T	TET2	p.R814C	missense
MDS386B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS391B	chr4:106180816	G	GGT	TET2	.	frameshift
MDS396B	chr4:106156616	G	A	TET2	p.R506K	missense
MDS398B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS403B	chr4:106190804	G	A	TET2	p.G1361D	missense
MDS403B	chr4:106196890	A	AC	TET2	.	frameshift
MDS410B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS411B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS412B	chr4:106157703	T	G	TET2	p.F868L	missense
MDS424B	chr4:106157703	T	G	TET2	p.F868L	missense

MDS433B	chr4:106158550	G	T	TET2	p.E1151X	nonsense
MDS435B	chr4:106196213	C	T	TET2	p.R1516X	nonsense
MDS335B	chr5:170834728	G	A	NPM1	p.A266T	missense
MDS426B	chr5:170814987	T	C	NPM1	p.L12P	missense
MDS435B	chr5:170832369	G	C	NPM1	p.E245Q	missense
MDS040	chr7:107718751	T	A	LAMB4	p.D633V	missense
MDS056	chr7:107696450	A	G	LAMB4	p.C1128R	missense
MDS056	chr7:107704245	G	A	LAMB4	p.P1008S	missense
MDS057	chr7:107689844	G	T	LAMB4	p.T1350N	missense
MDS057	chr7:107706935	C	T	LAMB4	p.G853S	missense
MDS107	chr7:107706947	G	A	LAMB4	p.R849C	missense
MDS169	chr7:107698340	C	T	LAMB4	p.G1106S	missense
MDS206B	chr7:107669538	G	A	LAMB4	p.A1699V	missense
MDS219B	chr7:107718664	G	A	LAMB4	p.A662V	missense
MDS225B	chr7:107674717	C	T	LAMB4	p.R1585Q	missense
MDS228B	chr7:107718664	G	A	LAMB4	p.A662V	missense
MDS253B	chr7:107674672	A	T	LAMB4	p.I1600K	missense
MDS273B	chr7:107710279	C	A	LAMB4	p.D726Y	missense
MDS274B	chr7:107689844	G	T	LAMB4	p.T1350N	missense
MDS316B	chr7:107696450	A	G	LAMB4	p.C1128R	missense
MDS330B	chr7:107704350	T	C	LAMB4	p.N973D	missense
MDS365B	chr7:107689844	G	T	LAMB4	p.T1350N	missense
MDS389B	chr7:107684230	G	A	LAMB4	p.L1480F	missense
MDS392B	chr7:107684230	G	A	LAMB4	p.L1480F	missense
MDS028	chr7:148523578	T	C	EZH2	p.Y292C	missense
MDS101	chr7:148523591	G	A	EZH2	p.R288X	nonsense
MDS132	chr7:148511190	C	A	EZH2	p.C571F	missense
MDS165	chr7:148506413	C	T	EZH2	p.C700Y	missense
MDS165	chr7:148506451	GT	G	EZH2	.	frameshift
MDS166	chr7:148506413	C	T	EZH2	p.C700Y	missense
MDS166	chr7:148506451	GT	G	EZH2	.	frameshift
MDS230B	chr7:148523590	C	A	EZH2	p.R288L	missense
MDS289B	chr7:148543658	CA	C	EZH2	.	frameshift
MDS322B	chr7:148524262	T	C	EZH2	p.K241R	missense
MDS328B	chr7:148506401	C	T	EZH2	.	splicing
MDS330B	chr7:148506441	A	G	EZH2	p.F691L	missense
MDS347B	chr7:148507424	C	A	EZH2	.	splicing
MDS369B	chr7:148506401	C	T	EZH2	.	splicing
MDS439B	chr7:148514994	CT	C	EZH2	.	frameshift
MDS029	chr9:5077540	T	C	JAK2	p.L651P	missense
MDS043	chr9:5073770	G	T	JAK2	p.V617F	missense
MDS060	chr9:5073770	G	T	JAK2	p.V617F	missense
MDS215B	chr9:5073770	G	T	JAK2	p.V617F	missense
MDS253B	chr9:5090548	A	G	JAK2	p.Q955R	missense
MDS288B	chr9:5090457	C	A	JAK2	p.L925I	missense
MDS322B	chr9:5064890	A	C	JAK2	p.E355A	missense

MDS329B	chr9:5090548	A	G	JAK2	p.Q955R	missense
MDS369B	chr9:5073770	G	T	JAK2	p.V617F	missense
MDS086	chr11:102589210	G	A	MMP8	p.A240V	missense
MDS161	chr11:102585371	C	A	MMP8	p.G369V	missense
MDS273B	chr11:102595493	T	A	MMP8	p.T32S	missense
MDS392B	chr11:102592135	C	T	MMP8	p.A207T	missense
MDS045	chr11:119142569	T	G	CBL	p.W190G	missense
MDS046	chr11:119148880	A	C	CBL	p.Q367P	missense
MDS046	chr11:119149235	G	C	CBL	p.G415R	missense
MDS046	chr11:119149251	G	A	CBL	p.R420Q	missense
MDS129	chr11:119148931	G	A	CBL	p.C384Y	missense
MDS170	chr11:119155978	C	T	CBL	p.P548L	missense
MDS285B	chr11:119148892	A	G	CBL	p.Y371C	missense
MDS314B	chr11:119170256	G	A	CBL	p.R829Q	missense
MDS388B	chr11:119148875	G	T	CBL	.	splicing
MDS403B	chr11:119149260	T	A	CBL	p.I423N	missense
MDS416B	chr11:119149235	G	T	CBL	p.G415C	missense
MDS417B	chr11:119144637	C	G	CBL	p.S217C	missense
MDS432B	chr11:119146738	G	C	CBL	p.G301R	missense
MDS036	chr12:12038897	C	T	ETV6	p.A397V	missense
MDS048	chr12:12037507	T	G	ETV6	p.W380G	missense
MDS132	chr12:12022466	G	T	ETV6	p.R191L	missense
MDS177	chr12:12037501	C	T	ETV6	p.R378X	nonsense
MDS233B	chr12:12037429	T	A	ETV6	p.Y354N	missense
MDS237B	chr12:12037402	G	A	ETV6	p.V345I	missense
MDS242B	chr12:12037511	G	A	ETV6	p.G381E	missense
MDS252B	chr12:11992169	T	A	ETV6	p.F87I	missense
MDS259B	chr12:12043873	A	G	ETV6	.	splicing
MDS285B	chr12:12037475	G	A	ETV6	p.R369Q	missense
MDS288B	chr12:12038873	T	C	ETV6	p.M389T	missense
MDS302B	chr12:12038903	G	A	ETV6	p.R399H	missense
MDS304B	chr12:12022800	GC	G	ETV6	.	frameshift
MDS316B	chr12:12022356	A	G	ETV6	.	splicing
MDS341B	chr12:12022466	G	T	ETV6	p.R191L	missense
MDS342B	chr12:12037516	C	T	ETV6	p.H383Y	missense
MDS357B	chr12:12037474	C	T	ETV6	p.R369W	missense
MDS364B	chr12:12037475	G	A	ETV6	p.R369Q	missense
MDS392B	chr12:12038903	G	A	ETV6	p.R399H	missense
MDS425B	chr12:12006363	G	A	ETV6	p.D111N	missense
MDS436B	chr12:12022466	G	T	ETV6	p.R191L	missense
MDS439B	chr12:12037401	C	A	ETV6	p.Y344X	nonsense
MDS042	chr12:25398281	C	T	KRAS	p.G13D	missense
MDS168	chr12:25398284	C	A	KRAS	p.G12V	missense
MDS177	chr12:25398284	C	A	KRAS	p.G12V	missense
MDS220B	chr12:25398281	C	T	KRAS	p.G13D	missense
MDS222B	chr12:25368398	T	A	KRAS	p.I183F	missense

MDS239B	chr12:25368398	T	A	KRAS	p.I183F	missense
MDS343B	chr12:25398284	C	T	KRAS	p.G12D	missense
MDS348B	chr12:25398282	C	A	KRAS	p.G13C	missense
MDS355B	chr12:25378561	G	A	KRAS	p.A146V	missense
MDS365B	chr12:25380279	C	T	KRAS	p.G60D	missense
MDS401B	chr12:25368442	A	C	KRAS	p.L168W	missense
MDS409B	chr12:25368398	T	A	KRAS	p.I183F	missense
MDS435B	chr12:25398284	C	T	KRAS	p.G12D	missense
MDS028	chr12:46246675	C	T	ARID2	p.P1590L	missense
MDS220B	chr12:46246440	T	C	ARID2	p.C1512R	missense
MDS234B	chr12:46215265	G	A	ARID2	p.V234I	missense
MDS292B	chr12:46242634	T	G	ARID2	p.F532L	missense
MDS315B	chr12:46245774	G	A	ARID2	p.V1290M	missense
MDS369B	chr12:46125084	CAGTATTACTT GCGGTG	C	ARID2		frameshift
MDS405B	chr12:46246216	C	T	ARID2	p.A1437V	missense
MDS051	chr13:28592642	C	A	FLT3	p.D835Y	missense
MDS249B	chr13:28592686	G	T	FLT3	p.T820N	missense
MDS433B	chr13:28608242	A	AACTCCCATTT GAGATCATATT CCC	FLT3	.	nonframeshift
MDS109	chr15:90628130	T	C	IDH2	p.M397V	missense
MDS307B	chr15:90631734	A	C	IDH2	p.Y179D	missense
MDS329B	chr15:90634833	C	T	IDH2	p.M53I	missense
MDS143	chr17:1563731	A	G	PRPF8	p.C1594R	missense
MDS200B	chr17:1587828	G	A	PRPF8	p.P13L	missense
MDS237B	chr17:1563731	A	G	PRPF8	p.C1594R	missense
MDS268B	chr17:1580346	T	C	PRPF8	p.K702R	missense
MDS281B	chr17:1563731	A	G	PRPF8	p.C1594R	missense
MDS300B	chr17:1587822	G	A	PRPF8	p.P15L	missense
MDS337B	chr17:1580340	T	C	PRPF8	p.N704S	missense
MDS369B	chr17:1558791	T	C	PRPF8	p.N1947S	missense
MDS427B	chr17:1559855	T	C	PRPF8	p.H1875R	missense
MDS029	chr17:7577096	T	A	TP53	p.D281V	missense
MDS034	chr17:7578556	T	C	TP53	.	splicing
MDS126	chr17:7578176	C	T	TP53	.	splicing
MDS129	chr17:7577105	G	A	TP53	p.P278L	missense
MDS151	chr17:7578203	C	T	TP53	p.V216M	missense
MDS161	chr17:7578283	G	A	TP53	p.A189V	missense
MDS161	chr17:7578394	T	C	TP53	p.H179R	missense
MDS172	chr17:7577539	G	A	TP53	p.R248W	missense
MDS182	chr17:7579882	C	G	TP53	p.E11Q	missense
MDS200B	chr17:7577536	T	C	TP53	p.R249G	missense
MDS209B	chr17:7577536	T	A	TP53	p.R249W	missense
MDS212B	chr17:7578190	T	C	TP53	p.Y220C	missense
MDS248B	chr17:7578283	G	A	TP53	p.A189V	missense
MDS249B	chr17:7578458	G	A	TP53	p.R158C	missense
MDS252B	chr17:7578271	T	C	TP53	p.H193R	missense

MDS254B	chr17:7578406	C	T	TP53	p.R175H	missense
MDS258B	chr17:7578406	C	T	TP53	p.R175H	missense
MDS258B	chr17:7578496	A	G	TP53	p.L145P	missense
MDS265B	chr17:7579705	C	T	TP53	p.V31I	missense
MDS277B	chr17:7579705	C	T	TP53	p.V31I	missense
MDS305B	chr17:7577548	C	T	TP53	p.G245S	missense
MDS320B	chr17:7578190	T	C	TP53	p.Y220C	missense
MDS336B	chr17:7578191	A	G	TP53	p.Y220H	missense
MDS336B	chr17:7578503	C	T	TP53	p.V143M	missense
MDS347B	chr17:7574012	C	T	TP53	p.E339K	missense
MDS371B	chr17:7577085	C	T	TP53	p.E285K	missense
MDS378B	chr17:7579705	C	T	TP53	p.V31I	missense
MDS379B	chr17:7578190	T	C	TP53	p.Y220C	missense
MDS394B	chr17:7577548	C	T	TP53	p.G245S	missense
MDS394B	chr17:7577594	ACAGT	A	TP53	.	frameshift
MDS404B	chr17:7578503	C	T	TP53	p.V143M	missense
MDS406B	chr17:7577120	C	T	TP53	p.R273H	missense
MDS410B	chr17:7577569	A	C	TP53	p.C238G	missense
MDS414B	chr17:7577106	G	C	TP53	p.P278A	missense
MDS430B	chr17:7577106	G	T	TP53	p.P278T	missense
MDS431B	chr17:7579882	C	G	TP53	p.E11Q	missense
MDS433B	chr17:7579705	C	T	TP53	p.V31I	missense
MDS434B	chr17:7577114	C	T	TP53	p.C275Y	missense
MDS438B	chr17:7578397	T	G	TP53	p.H178P	missense
MDS048	chr17:29562973	C	G	NF1	p.P1303R	missense
MDS109	chr17:29663764	A	C	NF1	p.M2066L	missense
MDS134	chr17:29528055	A	G	NF1	p.N355D	missense
MDS166	chr17:29663764	A	C	NF1	p.M2066L	missense
MDS200B	chr17:29580004	G	A	NF1	p.E1387K	missense
MDS207B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS218B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS245B	chr17:29663764	A	C	NF1	p.M2066L	missense
MDS250B	chr17:29685993	G	T	NF1	p.G2686V	missense
MDS254B	chr17:29553653	C	CTATA	NF1	.	frameshift
MDS254B	chr17:29677207	T	G	NF1	p.L2422R	missense
MDS256B	chr17:29553484	CG	C	NF1	.	frameshift
MDS260B	chr17:29553484	CG	C	NF1	.	frameshift
MDS260B	chr17:29553487	T	A	NF1	p.I679N	missense
MDS263B	chr17:29548962	ATTT	A	NF1	.	nonframeshift
MDS281B	chr17:29553484	CG	C	NF1	.	frameshift
MDS282B	chr17:29553549	A	G	NF1	p.T700A	missense
MDS285B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS300B	chr17:29508446	C	T	NF1	p.A198V	missense
MDS312B	chr17:29652941	C	T	NF1	p.H1626Y	missense
MDS316B	chr17:29548962	ATTT	A	NF1	.	nonframeshift
MDS318B	chr17:29496998	T	A	NF1	p.L190X	nonsense

MDS325B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS333B	chr17:29548962	ATTT	A	NF1	.	nonframeshift
MDS337B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS347B	chr17:29562747	G	A	NF1	p.R1276Q	missense
MDS353B	chr17:29548962	ATTT	A	NF1	.	nonframeshift
MDS385B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS399B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS409B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS425B	chr17:29496998	T	A	NF1	p.L190X	nonsense
MDS425B	chr17:29580004	G	A	NF1	p.E1387K	missense
MDS057	chr17:74732959	G	GGGC	SRSF2	.	nonframeshift
MDS288B	chr17:74732959	G	C	SRSF2	p.P95R	missense
MDS307B	chr17:74732959	G	T	SRSF2	p.P95H	missense
MDS366B	chr17:74732959	G	T	SRSF2	p.P95H	missense
MDS373B	chr17:74733056	G	GA	SRSF2	.	frameshift
MDS435B	chr17:74732959	G	GGGC	SRSF2	.	nonframeshift
MDS028	chr18:42456612	A	G	SETBP1	p.E208G	missense
MDS046	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS058	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS106	chr18:42530279	C	T	SETBP1	p.P325L	missense
MDS106	chr18:42456653	G	C	SETBP1	p.A222P	missense
MDS107	chr18:42530279	C	T	SETBP1	p.P325L	missense
MDS109	chr18:42456653	G	C	SETBP1	p.A222P	missense
MDS110	chr18:42530279	C	T	SETBP1	p.P325L	missense
MDS126	chr18:42530692	C	T	SETBP1	p.R463C	missense
MDS162	chr18:42533119	A	T	SETBP1	p.S1272C	missense
MDS166	chr18:42530279	C	T	SETBP1	p.P325L	missense
MDS167	chr18:42530279	C	T	SETBP1	p.P325L	missense
MDS205B	chr18:42531907	G	A	SETBP1	p.D868N	missense
MDS214B	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS222B	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS244B	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS251B	chr18:42532882	G	A	SETBP1	p.A1193T	missense
MDS258B	chr18:42532171	G	C	SETBP1	p.D956H	missense
MDS260B	chr18:42531907	G	A	SETBP1	p.D868N	missense
MDS281B	chr18:42531647	C	T	SETBP1	p.T781I	missense
MDS284B	chr18:42532328	G	A	SETBP1	p.R1008H	missense
MDS285B	chr18:42531910	A	G	SETBP1	p.S869G	missense
MDS317B	chr18:42531919	G	A	SETBP1	p.G872R	missense
MDS320B	chr18:42532328	G	A	SETBP1	p.R1008H	missense
MDS322B	chr18:42531907	G	A	SETBP1	p.D868N	missense
MDS324B	chr18:42531983	C	A	SETBP1	p.S893Y	missense
MDS324B	chr18:42532328	G	A	SETBP1	p.R1008H	missense
MDS331B	chr18:42531877	G	A	SETBP1	p.E858K	missense
MDS331B	chr18:42531907	G	A	SETBP1	p.D868N	missense
MDS365B	chr18:42531907	G	A	SETBP1	p.D868N	missense

MDS370B	chr18:42530566	A	G	SETBP1	p.R421G	missense
MDS373B	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS375B	chr18:42531913	G	A	SETBP1	p.G870S	missense
MDS397B	chr18:42532870	C	T	SETBP1	p.R1189W	missense
MDS398B	chr18:42531914	G	T	SETBP1	p.G870V	missense
MDS426B	chr18:42531647	C	T	SETBP1	p.T781I	missense
MDS429B	chr18:42530684	A	G	SETBP1	p.K460R	missense
MDS037	chr19:10257188	G	C	DNMT1	p.S895R	missense
MDS139	chr19:10264989	G	A	DNMT1	p.R651W	missense
MDS151	chr19:10257031	A	G	DNMT1	p.F948L	missense
MDS233B	chr19:10291089	G	C	DNMT1	p.P128A	missense
MDS036	chr20:31022837	AT	A	ASXL1	.	frameshift
MDS040	chr20:31022853	C	T	ASXL1	p.Q780X	nonsense
MDS056	chr20:31022837	AT	A	ASXL1	.	frameshift
MDS059	chr20:31022402	TCACCACTGCC ATAGAGAGGC GGC	T	ASXL1	.	frameshift
MDS060	chr20:31024794	C	T	ASXL1	p.P1427S	missense
MDS087	chr20:31021466	C	G	ASXL1	p.R489G	missense
MDS162	chr20:31022415	A	T	ASXL1	p.R634X	nonsense
MDS162	chr20:31024480	C	T	ASXL1	p.P1322L	missense
MDS163	chr20:31024794	C	T	ASXL1	p.P1427S	missense
MDS166	chr20:31024770	A	T	ASXL1	p.K1419X	nonsense
MDS167	chr20:31022445	G	A	ASXL1	p.G644R	missense
MDS202B	chr20:31023087	C	T	ASXL1	p.Q858X	nonsense
MDS205B	chr20:31022289	C	T	ASXL1	p.Q592X	nonsense
MDS222B	chr20:31022402	TCACCACTGCC ATAGAGAGGC GGC	T	ASXL1	.	frameshift
MDS222B	chr20:31022436	A	G	ASXL1	p.I641V	missense
MDS224B	chr20:31022403	CACCACTGCC ATAGAGAGGC GGCC	C	ASXL1	.	frameshift
MDS235B	chr20:31022389	G	A	ASXL1	p.R625Q	missense
MDS242B	chr20:31022402	TCACCACTGCC ATAGAGAGGC GGC	T	ASXL1	.	frameshift
MDS245B	chr20:31023408	C	T	ASXL1	p.R965X	nonsense
MDS246B	chr20:31022592	C	T	ASXL1	p.R693X	nonsense
MDS260B	chr20:31022437	TCGGAGGGGG GGGTGGCC	T	ASXL1	.	frameshift
MDS260B	chr20:31023531	G	T	ASXL1	p.E1006X	nonsense
MDS263B	chr20:31022625	G	T	ASXL1	p.G704W	missense
MDS268B	chr20:31022712	C	T	ASXL1	p.Q733X	nonsense
MDS300B	chr20:31023270	A	G	ASXL1	p.I919V	missense
MDS307B	chr20:31022402	TCACCACTGCC ATAGAGAGGC GGC	T	ASXL1	.	frameshift
MDS308B	chr20:31022402	TCACCACTGCC ATAGAGAGGC GGC	T	ASXL1	.	frameshift
MDS310B	chr20:31022837	AT	A	ASXL1	.	frameshift

MDS314B	chr20:31022484	G	T	ASXL1	p.E657X	nonsense
MDS331B	chr20:31023408	C	T	ASXL1	p.R965X	nonsense
MDS347B	chr20:31021466	C	G	ASXL1	p.R489G	missense
MDS347B	chr20:31022898	TC	T	ASXL1	.	frameshift
MDS356B	chr20:31023973	A	G	ASXL1	p.H1153R	missense
MDS357B	chr20:31022936	TC	T	ASXL1	.	frameshift
MDS369B	chr20:31023615	A	T	ASXL1	p.K1034X	nonsense
MDS378B	chr20:31024260	A	G	ASXL1	p.M1249V	missense
MDS404B	chr20:31021176	C	A	ASXL1	p.S392X	nonsense
MDS404B	chr20:31023472	A	G	ASXL1	p.N986S	missense
MDS411B	chr20:31022592	C	T	ASXL1	p.R693X	nonsense
MDS425B	chr20:31022936	TC	T	ASXL1	.	frameshift
MDS430B	chr20:31024131	G	A	ASXL1	p.A1206T	missense
MDS036	chr21:36231774	G	A	RUNX1	p.R204X	nonsense
MDS048	chr21:36259179	CG	C	RUNX1	.	frameshift
MDS055	chr21:36171612	G	GA	RUNX1	.	frameshift
MDS057	chr21:36206710	GC	G	RUNX1	.	frameshift
MDS057	chr21:36206715	T	C	RUNX1	p.Q266R	missense
MDS059	chr21:36252882	G	T	RUNX1	p.D160E	missense
MDS151	chr21:36259172	G	A	RUNX1	p.R107C	missense
MDS228B	chr21:36252884	C	A	RUNX1	p.D160Y	missense
MDS233B	chr21:36231860	A	T	RUNX1	p.L175Q	missense
MDS235B	chr21:36171607	G	A	RUNX1	p.R320X	nonsense
MDS244B	chr21:36164611	C	A	RUNX1	p.E422X	nonsense
MDS244B	chr21:36259156	A	G	RUNX1	p.L112P	missense
MDS247B	chr21:36164726	C	CG	RUNX1	.	frameshift
MDS249B	chr21:36259154	G	A	RUNX1	p.P113S	missense
MDS263B	chr21:36206890	G	A	RUNX1	p.Q208X	nonsense
MDS263B	chr21:36252929	T	C	RUNX1	p.R145G	missense
MDS264B	chr21:36252865	C	T	RUNX1	p.R166Q	missense
MDS264B	chr21:36252868	C	T	RUNX1	p.G165D	missense
MDS267B	chr21:36259171	C	T	RUNX1	p.R107H	missense
MDS270B	chr21:36171697	A	G	RUNX1	p.S290P	missense
MDS277B	chr21:36164881	C	T	RUNX1	p.D332N	missense
MDS277B	chr21:36252869	CG	C	RUNX1	.	frameshift
MDS288B	chr21:36164597	CG	C	RUNX1	.	frameshift
MDS300B	chr21:36164599	G	T	RUNX1	p.P426T	missense
MDS307B	chr21:36231817	G	GT	RUNX1	.	frameshift
MDS328B	chr21:36252940	G	T	RUNX1	p.S141X	nonsense
MDS334B	chr21:36259162	T	A	RUNX1	p.K110M	missense
MDS366B	chr21:36171607	G	A	RUNX1	p.R320X	nonsense
MDS372B	chr21:36171599	TGA	T	RUNX1	.	frameshift
MDS392B	chr21:36164601	G	A	RUNX1	p.P425L	missense
MDS398B	chr21:36171607	G	A	RUNX1	p.R320X	nonsense
MDS425B	chr21:36231791	T	C	RUNX1	p.D198G	missense
MDS433B	chr21:36252939	C	CG	RUNX1	.	frameshift

MDS033	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS040	chr21:44514883	C	T	U2AF1	p.D122N	missense
MDS040	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS041	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS048	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS055	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS056	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS119	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS141	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS144	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS158	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS167	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS168	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS181	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS201B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS202B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS204B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS207B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS210B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS222B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS225B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS242B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS244B	chr21:44514777	T	G	U2AF1	p.Q157P	missense
MDS246B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS251B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS253B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS259B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS267B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS268B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS285B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS292B	chr21:44514777	T	C	U2AF1	p.Q157R	missense
MDS292B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS302B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS304B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS308B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS322B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS331B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS333B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS335B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS341B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS342B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS352B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS355B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS365B	chr21:44514777	T	G	U2AF1	p.Q157P	missense
MDS367B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS370B	chr21:44524456	G	A	U2AF1	p.S34F	missense

MDS372B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS375B	chr21:44513286	C	T	U2AF1	p.G217S	missense
MDS380B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS395B	chr21:44514777	T	G	U2AF1	p.Q157P	missense
MDS398B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS404B	chr21:44514777	T	G	U2AF1	p.Q157P	missense
MDS411B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS416B	chr21:44524453	C	A	U2AF1	p.R35L	missense
MDS417B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS425B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS426B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS427B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS436B	chr21:44524456	G	T	U2AF1	p.S34Y	missense
MDS439B	chr21:44524456	G	A	U2AF1	p.S34F	missense
MDS028	chrX:15833959	CTA	C	ZRSR2	.	frameshift
MDS028	chrX:15833993	G	A	ZRSR2	p.G251R	missense
MDS060	chrX:15822297	C	T	ZRSR2	p.R126X	nonsense
MDS257B	chrX:15822298	GA	G	ZRSR2	.	frameshift
MDS316B	chrX:15836709	G	A	ZRSR2	.	splicing
MDS324B	chrX:15827326	G	T	ZRSR2	p.E148X	nonsense
MDS328B	chrX:15833814	A	G	ZRSR2	p.H191R	missense
MDS418B	chrX:15841210	G	C	ZRSR2	p.D432H	missense
MDS109	chrX:76919032	A	AT	ATRX	.	frameshift
MDS223B	chrX:76918966	C	T	ATRX	p.R1342Q	missense
MDS249B	chrX:76939300	T	G	ATRX	p.Q483P	missense
MDS259B	chrX:76918946	C	T	ATRX	p.D1349N	missense
MDS278B	chrX:76849299	TAGA	T	ATRX	.	nonframeshift
MDS325B	chrX:76949319	G	GT	ATRX	.	frameshift
MDS337B	chrX:76939133	G	C	ATRX	p.Q539E	missense
MDS337B	chrX:76949382	C	CT	ATRX	.	frameshift
MDS051	chrX:123171446	T	C	STAG2	p.F120L	missense
MDS134	chrX:123197716	C	T	STAG2	p.R614X	nonsense
MDS168	chrX:123202421	T	TG	STAG2	NM_001042 749	frameshift
MDS212B	chrX:123195171	A	G	STAG2	p.E505G	missense
MDS250B	chrX:123215314	C	T	STAG2	p.R954C	missense
MDS276B	chrX:123176469	C	T	STAG2	p.R146X	nonsense
MDS278B	chrX:123224616	T	TAA	STAG2	.	splicing
MDS307B	chrX:123215311	C	T	STAG2	p.R953X	nonsense
MDS316B	chrX:123200250	G	A	STAG2	p.W743X	nonsense
MDS328B	chrX:123182862	AAAAT	A	STAG2	NM_001042 749	frameshift
MDS329B	chrX:123197000	TGCA	T	STAG2	NM_001042 749	nonframeshift
MDS386B	chrX:123224477	G	GC	STAG2	NM_001042 749	frameshift
MDS391B	chrX:123197056	G	A	STAG2	.	splicing
MDS392B	chrX:123224524	TGA	T	STAG2	NM_001042 749	frameshift

MDS409B

chrX:123197054

A

G

STAG2

p.K607R

missense
