					Genotype				Capture array results												
Chrom	Site	State	MIEtype	Ref	m	f	d	s	maq	maq.pl	binom	Massarray	Assessment	Change	Context	KnownSNP	maq-quals	Coverage	Mapability	Deletion?	Predicted gap extent
1	85969099	haplo-maternal	unexp	A	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transversion(A>T)	caa		-	12,12,10,19	1.000	none	
2	1691105	haplo-paternal	unexp	G	aa	aa	aa	ab	PASS	PASS		PASS	DE_NOVO(son)	transition(G>A)	CGC		51,30,63,49	16,9,20,10	1.000	none	
2	71914845	haplo-maternal	unexp	T	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(T>C)	ATT		54,30,72,153	17,20,23,17	1.000	none	
2	95299933	nonidentical	unexp	G	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transition(G>A)	AGG		-	12,24,15,33	1.000	none	
2	109399651	nonidentical	unexp	G	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(G>A)	cgg		60,51,93,68	19,16,30,21	0.690	none	
2	201789780	haplo-paternal	unexp	A	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(A>G)	aat		80,57,99,84	33,18,32,20	0.858	none	
3	72823935	nonidentical	unexp	T	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(T>C)	atg		90,60,96,200	29,19,31,29	0.855	none	
3	130721115	nonidentical	unexp	G	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transversion(G>C)	AGT		72,45,96,39	23,14,14,12	1.000	none	
4	31542696	haplo-maternal	unexp	G	aa	aa	aa	ab	PASS	PASS		PASS	DE_NOVO(son)	transition(G>A)	CGA		36,51,108,117	11,16,35,15	0.892	none	
4	42215575	haplo-maternal	unexp	C	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(C>T)	CCC		59,48,209,30	30,25,35,9	0.965	none	
4	80013989	nonidentical	unexp	G	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(G>A)	AGT		51,42,87,54	16,13,24,17	0.818	none	
4	157090042	identical	unexp	G	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transition(G>A)	TGT		-	12,21,12,32	1.000	none	
5	1427627	haplo-paternal	unexp	A	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(A>G)	CAC		99,48,87,87	32,15,28,21	0.995	none	
5	35382267	nonidentical	unexp	G	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transversion(G>T)	TGC		54,36,93,80	17,11,30,13	0.979	none	
5	81177251	haplo-paternal	unexp	C	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transversion(C>G)	GCA		69,54,90,118	22,17,29,14	1.000	none	
5	116118370	identical	unexp	C	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(C>T)	gct		99,30,105,140	32,9,34,16	0.997	none	
5	143793752	haplo-maternal	unexp	C	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(C>T)	ACC		45,54,84,111	14,17,27,15	1.000	none	
6	135026014	haplo-paternal	unexp	T	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transition(T>C)	att		-	12,13,18,33	1.000	none	
6	135635788	haplo-paternal	unexp	G	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(G>A)	tga		45,39,75,139	14,12,24,14	0.899	none	
7	42486962	haplo-paternal	unexp	T	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transversion(T>G)	TTA		75,54,81,85	24,17,26,13	0.999	none	
7	119157786	haplo-maternal	unexp	A	aa	aa	ab	aa	PASS	PASS		PASS	DE_NOVO(dtr)	transition(A>G)	cat		84,69,76,72	27,22,33,23	0.970	none	
8	74585881	haplo-maternal	unexp	T	aa	aa	ab	aa	PASS	PASS	PASS	PASS(1)	DE_NOVO(dtr)	transition(T>C)	ATG		129,57,255,63	42,18,37,20	0.917	none	
8	81696988	haplo-maternal	unexp	G	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(G>A)	CGC		63,45,109,33	20,14,27,10	0.937	none	
8	87655888	haplo-maternal	unexp	G	aa	aa	ab	aa	PASS	PASS		PASS	DE_NOVO(dtr)	transition(G>A)	GGT		69,42,85,48	22,13,27,15	1.000	none	
9	25560827	haplo-paternal	unexp	G	aa	aa	aa	ab			PASS	PASS	DE_NOVO(son)	transition(G>A)	CGT		-	12,27,13,53	1.000	none	
9	90277009	haplo-maternal	unexp	T	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(T>C)	tta		78,30,81,140	25,9,26,15	0.766	none	
10	33475280	haplo-paternal	unexp	A	aa	aa	aa	ab	PASS	PASS		PASS(2)	DE_NOVO(son)	transition(A>G)	CAA		75,60,76,120	24,19,37,17	1.000	none	
10	68024084	nonidentical	unexp	T	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(T>C)	atg		87,48,108,168	28,15,35,20	1.000	none	
11	9794133	nonidentical	unexp	G	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(G>A)	CGG		81,45,47,148	26,14,26,15	0.997	none	
11	76223195	haplo-paternal	unexp	A	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transition(A>G)	AAA		-	12,26,17,48	0.991	none	
11	133584666	nonidentical	unexp	A	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transversion(A>C)	CAG		63,45,164,42	20,14,21,13	1.000	none	
12	46068066	haplo-maternal	unexp	C	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transition(C>T)	ccc		-	12,21,17,32	0.994	none	
12	129342837	haplo-maternal	unexp	A	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transversion(A>T)	aag		69,33,93,137	22,10,30,15	0.971	none	
13	93693758	haplo-maternal	unexp	G	aa	aa	aa	ab		PASS	PASS	PASS	DE_NOVO(son)	transversion(G>T)	GGG		-	12,28,8,38	1.000	none	
15	82252897	haplo-maternal	unexp	G	aa	aa	aa	ab	PASS	PASS		PASS	DE_NOVO(son)	transition(G>A)	cgt		51,51,72,91	16,16,23,13	0.843	none	
16	84852120	nonidentical	unexp	T	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(T>C)	gtc		87,47,132,116	28,26,43,17	1.000	none	
17	48770795	haplo-maternal	unexp	A	aa	aa	ab	aa		PASS	PASS	PASS	DE_NOVO(dtr)	transversion(A>C)	gac		-	12,17,8,27	0.982	none	
18	63860567	nonidentical	unexp	T	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(T>C)	ttt		72,30,154,18	23,9,26,5	0.997	none	
18	71123428	nonidentical	unexp	G	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(G>A)	gga		51,36,126,27	16,11,26,8	1.000	none	
18	73326839	nonidentical	unexp	G	aa	aa	aa	ab	PASS			PASS	DE_NOVO(son)	transition(G>A)	tgt		63,60,81,50	20,19,26,13	1.000	none	
19	3987841	haplo-paternal	unexp	C	aa	aa	aa	ab	PASS	PASS	PASS	PASS	DE_NOVO(son)	transition(C>T)	acg		255,255,255,255	115,103,101,102	0.939	none	
19	14748234	haplo-paternal	unexp	C	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(C>T)	CCC		42,39,98,39	13,12,17,12	0.953	none	
20	18515852	haplo-maternal	unexp	G	aa	aa	aa	ab		PASS	PASS	PASS	DE_NOVO(son)	transition(G>A)	CGC		-	12,21,17,38	0.702	none	
20	36888576	haplo-maternal	unexp	A	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transversion(A>T)	TAT		99,78,253,66	32,25,39,21	0.992	none	
20	55900262	haplo-maternal	unexp	G	aa	aa	ab	aa	PASS	PASS	PASS	PASS	DE_NOVO(dtr)	transition(G>A)	CGC		99,42,206,57	32,24,33,18	0.992	none	
1	16814216	haplo-maternal,error	unexp	T	aa	aa	ab	aa	PASS	PASS		ab,ab,ab,ab	FALSE_CALL	transition(T>C)	GTA	rs12143040	88,84,134,27	49,38,68,37	0.888	none	
1	142717779	haplo-maternal,compression	unexp	A	aa	aa	ab	aa			PASS		FALSE_CALL	transversion(A>C)	AAC	rs4844468	-	12,19,12,35	0.804	none	
1	143740064	haplo-maternal,compression	unexp	G	aa	aa	ab	aa	PASS	PASS		ab,aa,ab,ab	FALSE_CALL	transversion(G>T)	TGA		34,108,62,7	44,35,45,29	1.000	none	
1	143744891	haplo-maternal,compression	unexp	A	aa	aa	ab	ab	PASS	PASS		ab,aa,ab,ab	FALSE_CALL	transition(A>G)	GAT		59,57,72,27	44,18,59,29	1.000	none	
1	232979650	identical,compression	unexp	A	aa	aa	aa	ab	PASS	PASS		aa,ab,aa,ab	FALSE_CALL	transition(A>G)	CAC		108,31,238,70	47,61,78,55	0.977	none	
1	232981014	identical,compression	unexp	G	aa	aa	aa	ab	PASS	PASS		aa,ab,aa,ab	FALSE_CALL	transition(G>A)	GGC		105,56,111,59	34,28,48,28	1.000	none	
2	737985	haplo-paternal	unexp	G	aa	aa	ab	ab	PASS	PASS			FALSE_CALL?	transition(G>A)	CGA		196,46,63,5	64,76,66,66	0.952	none	
2	37825874	nonidentical,error	unexp	T	aa	aa	ab	aa		PASS	PASS		FALSE_CALL?	transition(T>C)	atg		-	12,33,12,36	0.997	none	
2	91133517	nonidentical,compression	unexp	G	aa	aa	aa	ab	PASS	PASS		ab,ab,ab,ab	FALSE_CALL	transition(G>A)	GGC	rs2558007	95,85,99,43	49,38,44,30	0.867	none	
2	221104856	identical	unexp	T	aa	aa	ab	ab		PASS	PASS	ab,aa,ab,ab	FALSE_CALL	transition(T>C)	ata	rs6738802	-	9,28,20,31	0.954	none	
2	240487585	haplo-paternal	unexp	G	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transition(G>A)	ggt	known-A	151,181,184,51	59,59,74,25	0.875	none	
2	240487591	haplo-paternal	unexp	C	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transversion(C>A)	acg	known-A	102,117,160,104	61,56,71,25	0.875	none	
2	242465772	haplo-paternal	unexp	G	aa	aa	aa	ab		PASS	PASS		FALSE_CALL	transition(G>A)	CGA	rs6725983	-	10,42,32,61	0.982	none	
3	605958	identical,compression	unexp	A	aa	aa	aa	ab			PASS		FALSE_CALL	transversion(A>T)	CAG	rs62236960	-	12,36,18,73	1.000	none	
3	613249	identical,compression	unexp	G	aa	aa	ab	ab			PASS		FALSE_CALL?	transition(G>A)	CGG		-	11,29,20,83	1.000	none	
3	75781713	nonidentical,error	unexp	G	aa	aa	ab	aa	PASS	PASS			FALSE_CALL?	transition(G>A)	ggc		47,123,79,99	79,62,89,73	0.964	none	
3	76066817	nonidentical,error	unexp	A	aa	aa	ab	aa	PASS	PASS		aa,ab,ab,aa	FALSE_CALL	transition(A>G)	TAA	rs12490585	78,33,33,45	25,10,29,14	0.866	none	
3	79750950	haplo-maternal	unexp	A	aa	aa	ab	ab	PASS				FALSE_CALL	transition(A>G)	cac	rs12497956	172,36,169,71	90,75,85,90	0.854	none	
3	196948540	haplo-paternal	unexp	C	aa	aa	aa	ab		PASS	PASS	ab,aa,aa,ab	FALSE_CALL	transition(C>T)	TCG	rs2688443	-	12,28,30,47	1.000	none	
4	31518	identical,error	unexp	A	aa	aa	ab	ab	PASS	PASS		ab,ab,ab,ab	FALSE_CALL	transition(A>G)	cat	rs3950741	47,96,9,89	75,73,91,82	0.554	none	
4	34799	identical,error	unexp	C	aa	aa	aa	ab	PASS	PASS		ab,ab,aa,ab(3)	FALSE_CALL	transition(C>T)	cca	known-T	92,57,255,126	83,68,90,65	0.793	none	
4	7684745	nonidentical	unexp	G	aa	aa	ab	aa		PASS	PASS	aa,ab,ab,aa	FALSE_CALL	transversion(G>T)	tgt	rs1468250	-	12,27,17,40	1.000	none	
4	41113902	identical	unexp	T	aa	aa	ab	ab	PASS	PASS			FALSE_CALL?	transition(T>C)	GTT		47,120,31,15	47,39,61,34	0.844	none	
4	157801214	identical	unexp	G	aa	aa	ab	ab		PASS	PASS	ab,aa,ab,ab	FALSE_CALL	transition(G>A)	AGG		-	11,44,35,78	1.000	none	
4	189789677	nonidentical	unexp	T	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transition(T>C)	CTG	known-C	255,40,255,30	113,111,107,110	0.974	none	
4	190785690	nonidentical,compression	unexp	C	aa	aa	ab	aa		PASS	PASS	ab,ab,ab,ab	FALSE_CALL	transversion(C>A)	CCT		-	9,30,21,37	0.917	none	
5	763726	haplo-paternal	unexp	T	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transversion(T>A)	CTC	rs6863352	184,32,223,127	84,99,103,69	0.775	none	
5	149292055	haplo-maternal	unexp	G	aa	aa	aa	ab	PASS	PASS			FALSE_CALL?	transversion(G>T)	CGG		84,63,105,32	27,20,34,23	0.883	none	
6	31412187	identical,error	unexp	T	aa	aa	ab	ab			PASS		FALSE_CALL	transition(T>C)	ttg	rs28752929	-	12,20,34,34	1.000	none	
6	57380804	identical,compression	unexp	T	aa	aa	ab	aa	PASS	PASS			FALSE_CALL	transversion(T>A)	ctc	rs2397285	57,126,240,51	49,41,64,51	0.980	none	
6	57621375	identical,compression	unexp	G	aa	aa	ab	aa	PASS	PASS			FALSE_CALL?	transition(G>A)	CGT		90,49,44,20	40,28,51,29	0.950	none	
6	148447968	haplo-paternal	unexp	T	aa	aa	ab	ab		PASS	PASS		FALSE_CALL	transition(T>C)	ATG	rs17592701	-	12,29,8,17	1.000	none	
7	56528718	haplo-paternal,error	unexp	A	aa	aa	aa	ab			PASS		FALSE_CALL	transition(A>G)	gaa	known-G	-	11,36,27,58	1.000	none	
7	62743540	haplo-paternal,error	unexp	G	aa	aa	ab	aa		PASS	PASS		FALSE_CALL	transversion(G>T)	ggg	rs4717848	-	12,17,14,26	0.821	none	
7	62743550	haplo-paternal,error	unexp	C	aa	aa	ab	aa		PASS	PASS		FALSE_CALL	transversion(C>A)	acg	rs9647715	-	12,18,13,25	0.821	none	
7	64899092	haplo-paternal,error	unexp	T	aa	aa	ab	ab	PASS	PASS		aa,ab,ab,ab	FALSE_CALL	transition(T>C)	atg	rs73700063	135,44,52,46	44,31,48,37	0.787	none	
7	157152689	nonidentical	unexp	T	aa	aa	ab	aa	PASS	PASS			FALSE_CALL	transversion(T>A)	CTG	rs11765498	40,151,144,255	104,101,91,106	0.771	none	
8	1457016	haplo-maternal,error	unexp	G	aa	aa	ab	ab	PASS	PASS			FALSE_CALL	transition(G>A)	CGG	known-A	189,155,233,45	74,71,90,15	0.717	none	
8	2065783	haplo-maternal	unexp	T	aa	aa	ab	aa			PASS		FALSE_CALL?	transition(T>C)	GTG		-	12,61,34,39	0.942	none	
8	2220848	identical	unexp	G	aa	aa	ab	aa	PASS	PASS			FALSE_CALL?	transition(G>A)	TGT		75,72,33,72	24,23,27,23	0.920	none	
8	58280949	haplo-maternal,error	unexp	C	aa	aa	ab	ab	PASS	PASS		ab,aa,ab,ab	FALSE_CALL	transition(C>T)	GCG	rs11997230	57,255,44,56	137,128,143,138	0.993	none	
8	96719527	haplo-maternal	unexp	C	aa	aa	ab	ab		PASS	PASS	ab,aa,ab,ab	FALSE_CALL	transversion(C>A)	gcc	rs10956975	-	9,22,15,35	0.809	none	
8	140676003	haplo-paternal	unexp	A	aa	aa	ab	ab	PASS	PASS		ab,aa,aa,ab	FALSE_CALL	transition(A>G)	TAC	rs2960275	38,90,157,79	42,29,51,39	1.000	none	
9	23287632	haplo-paternal	unexp	A	aa	aa	ab	aa		PASS	PASS	ab,aa,ab,aa	FALSE_CALL	transition(A>G)	AAA	rs7873948	-	9,8,8,20	1.000	none	
9	131232357	identical,error	unexp	T	aa	aa	ab	aa			PASS		FALSE_CALL	transition(T>C)	TTA	known-C	-	12,24,13,28	0.896	none	
9	131232362	identical,error	unexp	A	aa	aa	ab	aa			PASS		FALSE_CALL	transversion(A>T)	TAG	known-T	-	12,25,13,29	0.896	none	
9	131236138	identical,error	unexp	G	aa	aa	ab	ab	PASS	PASS		aa,ab,ab,ab	FALSE_CALL	transition(G>A)	GGA	known-A	90,41,94,143	41,36,65,40	1.000	none	
10	1195675	nonidentical	unexp	T	aa	aa	aa	ab	PASS	PASS			FALSE_CALL?	transition(T>C)	GTA		105,105,131,49	34,42,56,39	0.953	none	
10	2533003	nonidentical,error	unexp	A	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transversion(A>T)	cac	known-T	42,82,235,69	58,61,77,20	1.000	none	
10	7711590	nonidentical	unexp	G	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transition(G>A)	CGT	rs11816258	185,227,255,33	95,92,117,40	0.744	none	
10	46479989	identical,compression	unexp	A	aa	aa	ab	ab	PASS	PASS		ab,ab,ab,ab	FALSE_CALL	transition(A>G)	GAA	rs35806870	39,30,56,10	40,51,49,36	1.000	none	
10	127571626	haplo-maternal,compression	unexp	T	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transversion(T>A)	ATC	rs4995648	46,117,66,46	73,58,90,64	0.849	none	
10	129084386	haplo-maternal	unexp	G	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transversion(G>T)	GGT	known-T	140,117,199,49	64,58,78,49	0.998	none	
10	133616371	identical	unexp	T	aa	aa	ab	ab			PASS		FALSE_CALL?	transversion(T>G)	ATC		-	12,42,83,31	0.756	none	
10	134456236	identical	unexp	A	aa	aa	ab	ab	PASS	PASS			FALSE_CALL	transition(A>G)	TAC	rs7085256	177,34,67,75	82,60,49,29	0.633	none	
11	5738465	haplo-maternal	unexp	A	aa	aa	ab	ab		PASS	PASS	nn,aa,ab,ab(4)	FALSE_CALL?	transition(A>G)	AAC	rs1032647	-	9,27,18,46	1.000	none	
12	95470861	nonidentical	unexp	G	aa	aa	ab	aa		PASS	PASS	ab,aa,ab,aa	FALSE_CALL	transversion(G>T)	TGA	known-T	-	12,23,13,45	0.970	none	
12	129533356	haplo-maternal	unexp	A	aa	aa	ab	aa	PASS	PASS			FALSE_CALL?	transversion(A>T)	AAT		191,30,41,62	98,75,82,76	0.639	none	
12	131480800	haplo-maternal	unexp	G	aa	aa	ab	aa			PASS		FALSE_CALL	transition(G>A)	GGG	known-A	-	12,40,16,42	0.984	none	
13	20714816	haplo-paternal	unexp	A	aa	aa	aa	ab			PASS	aa,aa,aa,aa	FALSE_CALL	transition(A>G)	aaa		-	11,23,17,43	0.983	none	
13	23862723	nonidentical	unexp	G	aa	aa	ab	aa			PASS		FALSE_CALL?	transition(G>A)	CGG		-	12,18,19,27	0.837	none	
14	19267788	identical	unexp	A	aa	aa	ab	ab		PASS	PASS	aa,ab,ab,ab	FALSE_CALL	transition(A>G)	cag	rs10146850	-	9,25,22,27	0.906	none	
14	19321290	identical	unexp	G	aa	aa	ab	ab		PASS	PASS		FALSE_CALL	transversion(G>T)	tgc	rs35511196	-	9,35,21,49	0.868	none	
14	49966681	identical	unexp	T	aa	aa	ab	ab	PASS		PASS	ab,ab,ab,ab	FALSE_CALL	transition(T>C)	CTT	rs36082397	87,30,136,88	28,9,27,15	0.907	none	
15	19109802	haplo-paternal,error	unexp	A	aa	aa	ab	aa	PASS	PASS			FALSE_CALL?	transversion(A>T)	gaa		68,102,91,123	48,33,42,40	0.993	none	
15	19200096	haplo-paternal,error	unexp	C	aa	aa	aa	ab	PASS	PASS		ab,aa,aa,ab	FALSE_CALL	transition(C>T)	acc		60,105,202,85	61,34,66,32	0.987	none	
15	19368221	haplo-paternal,error	unexp	G	aa	aa	ab	aa	PASS	PASS		ab,aa,ab,aa	FALSE_CALL	transversion(G>T)	tgg	rs3911692	50,45,65,66	27,14,29,21	1.000	none	
15	19370641	haplo-paternal,error	unexp	T	aa	aa	aa	ab	PASS	PASS		ab,aa,aa,ab	FALSE_CALL	transition(T>C)	ATG	rs11858849	37,45,105,38	31,14,34,25	0.929	none	
15	19382000	haplo-paternal,error	unexp	C	aa	aa	ab	aa	PASS	PASS		ab,aa,ab,aa	FALSE_CALL	transition(C>T)	ACG		70,117,62,105	49,38,56,34	0.679	none	
15	19387933	haplo-paternal,error	unexp	G	aa	aa	ab	aa	PASS	PASS		ab,aa,ab,aa	FALSE_CALL	transition(G>A)	TGA		30,81,99,66	28,26,38,21	0.712	none	
15	19412486	haplo-paternal,error	unexp	G	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transition(G>A)	GGA	known-A	66,83,141,40	62,35,46,43	1.000	none	
15	19412503	haplo-paternal,error	unexp	C	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transition(C>T)	GCC	known-T	50,129,148,31	68,42,48,48	1.000	none	
15	19414305	haplo-paternal,compression	unexp	G	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transition(G>A)	CGA	rs12442256	55,72,178,67	48,23,58,26	0.979	none	
15	19427411	haplo-paternal,compression	unexp	A	aa	aa	aa	ab	PASS	PASS		ab,aa,aa,ab	FALSE_CALL	transition(G>A)	TAt	rs2605996	63,148,190,96	69,48,62,42	0.950	none	
15	19430687	haplo-paternal,compression	unexp	G	aa	aa	ab	aa	PASS	PASS		ab,aa,ab,aa	FALSE_CALL	transition(G>A)	TGA	rs2664965	143,157,35,63	59,51,63,40	0.993	none	
16	32482311	identical,compression	unexp	T	aa	aa	ab	ab		PASS	PASS		FALSE_CALL	transversion(T>A)	TTT	rs28501539	-	12,39,14,43	0.941	none	
17	21162973	nonidentical,compression	unexp	T	aa	aa	aa	ab		PASS	PASS		FALSE_CALL	transition(T>C)	atc	rs73302092	-	12,37,23,59	0.964	none	
17	41012410	haplo-maternal,compression	unexp	T	aa	aa	aa	ab	PASS	PASS		aa,ab,aa,ab	FALSE_CALL	transition(T>C)	GTA	rs2463518	238,47,243,56	78,47,93,68	0.984	none	
18	504512	haplo-paternal	unexp	G	aa	aa	ab	ab			PASS		FALSE_CALL?	transition(G>A)	CGC		-	12,28,38,42	0.614	none	
19	32575787	haplo-paternal,compression	unexp	A	aa	aa	aa	ab		PASS	PASS		FALSE_CALL?	transition(A>G)	aaa		-	11,51,45,82	0.919	none	
19	55014423	haplo-maternal	unexp	T	aa	aa	aa	ab	PASS	PASS			FALSE_CALL	transversion(T>G)	GTG	rs1640512	36,69,148,56	37,28,48,35	0.810	none	
20	62233042	haplo-paternal	unexp	G	aa	aa	ab	aa	PASS	PASS			FALSE_CALL	transversion(G>T)	GGC	rs509155	82,145,166,54	86,78,46,90	0.953	none	
21	10063381	nonidentical,error	unexp	T	aa	aa	ab	aa	PASS	PASS			FALSE_CALL?	transition(T>C)	ata		181,54,9,35	59,54,76,66	0.898	none	
22	21057589	identical	unexp	C	aa	aa	aa	ab			PASS		FALSE_CALL	transition(C>T)	ACA	known-T	-	11,42,27,68	0.967	none	
1	559819	identical,error	wrong	C	aa	bb	aa	aa	PASS		PASS		HEMIZ_GAP?	transition(T>C)	ACC		208,114,190,181	68,47,62,59	0.968	F->D&S	
1	25507657	haplo-maternal,error	wrong	G	aa	bb	bb	bb			PASS		HEMIZ_GAP	transition(A>G)	cgc	known-A	-	11,8,89,86	0.660	M->D&S	25504137-25508255
1	53366779	nonidentical	wrong	G	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	AGG	known-A	76,42,60,158	36,13,19,19	0.943	F->D	53366519-53368815
1	53366793	nonidentical	wrong	T	ab	aa	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	ATG	known-C	252,39,54,33	34,12,17,21	0.787	F->D	53366519-53368815
1	53366985	nonidentical	wrong	G	aa	bb	aa	ab			PASS		HEMIZ_GAP	transversion(T>G)	GGC	known-T	-	9,31,12,18	0.787	F->D	53366519-53368815
1	53368092	nonidentical	wrong	G	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(A>G)	GGC	known-A	-	12,30,10,13	1.000	F->D	53366519-53368815
1	62429362	haplo-maternal	wrong	T	ab	aa	ab	bb		PASS	PASS		HEMIZ_GAP	transversion(T>G)	CTT	known-G	-	12,29,8,43	0.871	F->S	62425930-62429664
1	94062267	haplo-maternal	wrong	T	aa	bb	bb	bb			PASS		HEMIZ_GAP	transversion(A>T)	atg	known-A	-	12,18,44,25	0.814	M->D&S	94060931-94063917
1	94062360	haplo-maternal	wrong	A	aa	bb	bb	bb	dtr only		son only		HEMIZ_GAP	transition(G>A)	TAA	known-G	51,84,59,22	16,27,27,17	0.814	M->D&S	94060931-94063917
1	157137894	haplo-maternal	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP?	transition(T>C)	CCA	known-T	-	12,47,10,88	0.964	F->S	
1	230526563	haplo-maternal	wrong	G	ab	aa	ab	bb			PASS		HEMIZ_GAP?	transition(G>A)	TGT	known-A	-	12,36,14,71	0.991	F->S	
2	11912697	haplo-maternal,error	wrong	C	bc	aa	aa	aa	PASS	PASS			FALSE_CALL	transversion(AC>T)	GCG	known-AT	92,213,68,60	84,81,80,68	0.817	none	
2	17983330	nonidentical	wrong	T	ab	aa	bb	aa			PASS		HEMIZ_GAP	transversion(G>T)	ttc	known-G	-	12,29,11,40	0.997	F->D	17982134-17984010
2	34579474	nonidentical	wrong	G	ab	aa	aa	bb	PASS	PASS	PASS		HEMIZ_GAP?	transition(G>A)	tga		178,39,87,48	30,12,28,15	0.998	F->S	
2	43945910	nonidentical	wrong	C	ab	aa	aa	bb	PASS	PASS	PASS		HEMIZ_GAP?	transversion(C>G)	GCT	known-G	255,123,255,82	76,40,94,48	0.934	F->S	
2	52608402	haplo-paternal,error	wrong	G	ab	aa	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	tgc	known-A	96,36,45,24	14,11,14,7	1.000	F->D&S	52602689-52615921
2	52626544	haplo-paternal,error	wrong	G	ab	aa	bb	aa			PASS		HEMIZ_GAP	transition(A>G)	cgt	known-A	-	9,26,10,19	0.973	F->D&S	52619342-52639834
2	116379010	nonidentical	wrong	A	aa	bb	bb	ab		PASS	PASS		HEMIZ_GAP	transversion(A>T)	TAA	known-T	-	12,18,9,26	1.000	M->D	116378187-116380178
2	116379089	nonidentical	wrong	C	aa	bb	bb	ab			PASS		HEMIZ_GAP	transition(C>T)	TCG	known-T	-	12,14,9,8	1.000	M->D	116378187-116380178
2	146583324	haplo-paternal	wrong	G	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(A>G)	CGG	known-A	-	12,19,9,50	0.949	M->S	146578826-146593391
2	184508805	identical	wrong	C	aa	ab	bb	bb	PASS		PASS		HEMIZ_GAP	transversion(A>C)	ACT	known-A	33,158,87,39	10,16,28,12	1.000	M->D&S	184502646-184521183
2	184510854	identical	wrong	G	aa	bb	bb	bb			PASS		HEMIZ_GAP	transversion(T>G)	gga	known-T	-	9,9,18,18	1.000	M->D&S	184502646-184521183
2	208061252	haplo-paternal,error	wrong	G	aa	ab	bb	ab		PASS	PASS		HEMIZ_GAP	transition(G>A)	AGG	known-A	-	12,22,24,30	0.988	M->D	208059341-208068027
2	208061257	haplo-paternal,error	wrong	C	aa	ab	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	ACA	known-T	63,61,42,76	20,14,13,17	0.988	M->D	208059341-208068027
2	208061308	haplo-paternal,error	wrong	G	aa	ab	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(G>T)	GGT	known-T	54,49,48,94	17,16,15,18	0.988	M->D	208059341-208068027
2	208063575	haplo-paternal,error	wrong	A	aa	ab	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(A>G)	TAC	known-G	57,153,60,165	18,18,19,25	1.000	M->D	208059341-208068027
2	208064035	haplo-paternal,error	wrong	T	aa	ab	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(T>G)	CTC	known-G	51,212,81,139	16,25,26,29	1.000	M->D	208059341-208068027
2	208064054	haplo-paternal,error	wrong	T	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(C>T)	GTG	known-C	66,59,90,190	21,30,29,32	1.000	M->D	208059341-208068027
2	208064167	haplo-paternal,error	wrong	A	aa	ab	bb	ab			PASS		HEMIZ_GAP	transversion(A>C)	AAT	known-C	-	10,21,36,19	1.000	M->D	208059341-208068027
2	208064559	haplo-paternal,error	wrong	C	aa	ab	bb	ab	PASS	PASS			HEMIZ_GAP	transition(C>T)	CCT	known-T	33,52,33,65	10,11,16,9	0.952	M->D	208059341-208068027
2	240231290	haplo-paternal,error	wrong	A	aa	bb	aa	bb	PASS				FALSE_CALL	transition(G>A)	TAT	known-G	75,78,41,32	58,25,71,12	0.648	none	
2	240231485	haplo-paternal,error	wrong	A	aa	bb	aa	bb	PASS				FALSE_CALL	transition(G>A)	TAT	known-G	88,39,135,39	60,23,73,12	0.665	none	
2	240231550	haplo-paternal,error	wrong	A	aa	bb	aa	bb	PASS				FALSE_CALL	transition(G>A)	TAT	known-G	90,30,129,48	57,20,65,15	0.665	none	
3	5512714	haplo-paternal	wrong	C	aa	ab	bb	ab	PASS	PASS			HEMIZ_GAP	transversion(C>A)	GCC	known-A	33,127,69,22	10,19,22,18	0.975	M->D	5509486-5515507
3	11620992	haplo-paternal	wrong	T	aa	bb	aa	aa	dtr only	dtr only	son only		HEMIZ_GAP	transition(T>C)	CTT	known-C	51,36,30,18	16,11,9,5	1.000	F->D&S	11620586-11622172
3	11621010	haplo-paternal	wrong	G	aa	bb	aa	aa	dtr only	dtr only	son only		HEMIZ_GAP	transversion(G>T)	TGT	known-T	57,42,36,15	18,13,11,4	1.000	F->D&S	11620586-11622172
3	31834938	identical	wrong	G	aa	bb	aa	ab			PASS		FALSE_CALL	transversion(C>G)	ggg	known-C	-	12,57,10,61	0.940	none	
3	65164406	haplo-paternal,error	wrong	C	aa	bb	ab	bb	PASS		PASS		HEMIZ_GAP	transition(T>C)	ACT	known-T	39,60,254,33	12,19,34,10	1.000	M->S	65163494-65191351
3	65164684	haplo-paternal,error	wrong	T	aa	bb	ab	bb	PASS		PASS		HEMIZ_GAP	transversion(G>T)	CTC	known-G	30,39,164,51	9,12,28,16	1.000	M->S	65163494-65191351
3	65169746	haplo-paternal,error	wrong	T	aa	ab	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	att	known-C	45,107,189,32	14,15,27,15	1.000	M->S	65163494-65191351
3	65177411	haplo-paternal,error	wrong	C	aa	bb	ab	bb	PASS		PASS		HEMIZ_GAP	transversion(G>C)	tct	known-G	39,54,170,42	12,17,31,13	0.942	M->S	65163494-65191351
3	65181623	haplo-paternal,error	wrong	G	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(A>G)	CGG	known-A	-	12,11,28,66	0.574	M->S	65163494-65191351
3	120835194	nonidentical	wrong	A	aa	bb	bb	ab			PASS		HEMIZ_GAP	transition(G>A)	CAG	known-G	-	9,18,15,18	1.000	M->D	120832680-120836946
3	120836685	nonidentical	wrong	C	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(T>C)	CCT	known-T	48,84,72,133	15,27,23,20	0.945	M->D	120832680-120836946
4	7686529	nonidentical	wrong	G	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP?	transition(G>A)	CGT	known-A	54,33,57,71	17,10,18,14	0.866	F->D	
4	10007733	haplo-maternal	wrong	T	aa	ab	aa	bb			PASS		HEMIZ_GAP	transversion(G>T)	atg	known-G	-	12,15,19,18	0.986	M->D&S	10001453-10011935
4	37941564	haplo-maternal	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP?	transition(T>C)	ACG	known-T	-	12,45,20,55	0.820	F->S	
4	63711170	nonidentical	wrong	T	aa	ab	aa	bb			PASS		HEMIZ_GAP?	transition(C>T)	atg	known-C	-	12,22,26,58	0.837	M->S	
4	63817716	nonidentical	wrong	C	aa	ab	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>G)	TCA		33,152,54,42	10,22,17,13	1.000	M->D	63815376-63837677
4	69067566	nonidentical,error	wrong	G	aa	bb	ab	aa	PASS		PASS		HEMIZ_GAP	transition(A>G)	ggg	known-A	75,39,226,42	24,12,37,13	0.939	F->S	69066338-69068154
4	69067699	nonidentical,error	wrong	G	aa	bb	ab	aa			PASS		HEMIZ_GAP	transversion(C>G)	ggt	known-C	-	12,50,21,51	0.939	F->S	69066338-69068154
4	69124384	nonidentical,error	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP	transversion(G>C)	cct	known-G	-	12,14,9,27	0.822	F->S	69123840-69128938
4	69125847	nonidentical,error	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(C>T)	ccg	known-T	-	12,29,10,47	0.946	F->S	69123840-69128938
4	69129446	nonidentical,error	wrong	C	aa	bb	ab	aa		PASS	PASS		HEMIZ_GAP	transition(C>T)	gca	known-T	-	12,39,14,53	0.952	F->S	69128940-69132097
4	69141754	nonidentical,error	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(C>T)	gca	known-T	-	12,23,9,48	0.999	F->S	69138917-69142124
4	69141760	nonidentical,error	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP	transversion(A>C)	tct	known-A	-	12,21,10,48	0.999	F->S	69138917-69142124
4	69145022	nonidentical,error	wrong	C	aa	bb	ab	aa	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>G)	TCC	known-G	78,36,255,36	25,11,43,11	0.930	F->S	69142126-69146161
4	70168035	nonidentical,error	wrong	G	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	tgt	known-A	33,36,51,87	10,11,16,12	0.880	M->D	70156982-70170225
4	70223184	nonidentical,error	wrong	T	aa	bb	ab	ab		PASS	PASS		HEMIZ_GAP	transition(T>C)	atg	known-C	-	12,15,20,20	0.934	M->D	70202356-70267011
4	70223674	nonidentical,error	wrong	G	aa	bb	bb	ab			PASS		HEMIZ_GAP	transversion(G>C)	agc	known-C	-	9,14,14,10	0.934	M->D	70202356-70267011
4	70229248	nonidentical,error	wrong	T	aa	ab	bb	aa	PASS	PASS			HEMIZ_GAP	transition(T>C)	ttg	known-C	45,111,66,36	14,14,21,11	0.846	M->D	70202356-70267011
4	73775212	nonidentical	wrong	G	ab	aa	bb	aa		PASS	PASS		HEMIZ_GAP	transversion(G>T)	TGC	known-T	-	12,37,12,24	1.000	F->D	73770217-73781245
4	73775318	nonidentical	wrong	G	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(A>G)	AGG		64,33,72,128	32,10,23,13	1.000	F->D	73770217-73781245
4	92152066	nonidentical	wrong	G	aa	bb	ab	aa	PASS		PASS		HEMIZ_GAP	transition(A>G)	agc	known-A	78,36,137,51	25,11,29,16	1.000	F->S	92151639-92157099
5	19411970	identical	wrong	G	aa	ab	bb	bb	PASS				HEMIZ_GAP?	transition(G>A)	CGA	known-A	48,114,45,21	15,13,14,6	1.000	M->D&S	
5	79982799	haplo-paternal	wrong	G	aa	bb	aa	aa			PASS		HEMIZ_GAP?	transition(G>A)	GGG		-	12,39,48,43	0.680	F->D&S	
5	104625990	identical,error	wrong	A	aa	bb	aa	aa	PASS		PASS		HEMIZ_GAP	transition(G>A)	aat	known-G	57,30,16,30	18,9,15,9	1.000	F->D&S	104596738-104643149
5	104633117	identical,error	wrong	T	aa	bb	aa	aa	PASS		PASS		HEMIZ_GAP	transition(C>T)	GTA	known-C	66,39,51,36	21,12,16,11	1.000	F->D&S	104596738-104643149
5	117418263	haplo-maternal	wrong	G	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	cgg	known-A	51,30,39,13	16,9,12,12	0.998	F->D	117409574-117422350
5	117419742	haplo-maternal	wrong	T	aa	bb	aa	ab			PASS		HEMIZ_GAP	transversion(G>T)	tta	known-G	-	9,17,12,25	1.000	F->D	117409574-117422350
5	144852786	haplo-maternal	wrong	C	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP?	transition(C>T)	gct	known-T	-	9,23,8,23	0.981	F->D	
5	155419383	haplo-maternal	wrong	T	aa	ab	aa	bb		PASS	PASS		HEMIZ_GAP	transition(T>C)	ATT	known-C	-	12,16,19,20	1.000	M->D&S	155407268-155433119
5	178284550	nonidentical	wrong	C	aa	bb	ab	aa	PASS		PASS		HEMIZ_GAP	transition(T>C)	gca	known-T	108,30,242,36	35,9,44,11	0.953	F->S	178279743-178285926
5	178285235	nonidentical	wrong	G	ab	aa	aa	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	cgg	known-A	172,36,120,33	32,11,39,10	0.953	F->S	178279743-178285926
5	180309317	nonidentical,error	wrong	C	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(T>C)	TCT		-	12,39,10,31	0.902	F->D	180307505-180363145
5	180309937	nonidentical,error	wrong	T	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(C>T)	ATA	known-C	-	12,29,13,24	0.902	F->D	180307505-180363145
5	180312420	nonidentical,error	wrong	A	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(G>A)	cat	known-G	-	9,35,10,16	0.929	F->D	180307505-180363145
5	180314315	nonidentical,error	wrong	C	ab	aa	bb	aa			PASS		HEMIZ_GAP	transition(T>C)	GCT	known-T	-	12,45,15,46	0.911	F->D	180307505-180363145
5	180314366	nonidentical,error	wrong	G	ab	aa	bb	aa			PASS		HEMIZ_GAP	transition(A>G)	GGA	known-A	-	12,50,19,33	0.911	F->D	180307505-180363145
5	180321636	nonidentical,error	wrong	C	ab	aa	bb	aa			PASS		HEMIZ_GAP	transversion(A>C)	gcg	known-A	-	12,28,11,25	1.000	F->D	180307505-180363145
5	180328015	nonidentical,error	wrong	C	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(T>C)	ACG		-	12,45,13,27	0.966	F->D	180307505-180363145
5	180342201	nonidentical,error	wrong	A	ab	aa	bb	aa	PASS				HEMIZ_GAP	transition(G>A)	AAC	known-G	107,30,48,63	34,9,15,20	0.900	F->D	180307505-180363145
5	180345111	nonidentical,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	AAT	known-G	72,39,99,212	23,12,32,23	0.853	F->D	180307505-180363145
5	180348441	nonidentical,error	wrong	C	aa	bb	aa	ab			PASS		HEMIZ_GAP	transversion(G>C)	ACT	known-G	-	12,38,8,34	0.873	F->D	180307505-180363145
5	180355240	nonidentical,error	wrong	T	aa	bb	aa	ab			PASS		HEMIZ_GAP	transversion(A>T)	gtg	known-A	-	9,26,9,29	1.000	F->D	180307505-180363145
6	7726783	haplo-paternal	wrong	C	aa	ab	bb	ab	PASS		PASS	PASS	**HEMIZ_GAP**	transition(T>C)	CCG	rs11756526	51,111,75,158	16,24,24,25	0.902	M->D	
6	8284028	identical,compression	wrong	A	aa	bb	bb	ab		PASS	PASS		HEMIZ_GAP	transition(A>G)	GAT	known-G	-	12,15,10,16	0.978	M->D&S	8282547-8286502
6	31406275	identical,error	wrong	C	aa	bb	bb	bb			PASS		FALSE_CALL	transversion(G>C)	tca	known-G	-	9,8,29,29	1.000	none	
6	31407116	identical,error	wrong	T	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(C>T)	atg	known-C	-	11,11,34,54	0.999	M->S	31407043-31407161
6	31411373	identical,error	wrong	A	aa	ab	bb	bb	PASS		PASS		HEMIZ_GAP?	transition(G>A)	cat	known-G	51,144,66,45	16,18,21,14	1.000	M->D&S	
6	33162359	identical	wrong	T	aa	bb	aa	aa			PASS		HEMIZ_GAP	transition(T>C)	ATC	known-C	-	9,8,21,8	1.000	F->D&S	33162070-33162434
6	33162364	identical	wrong	C	aa	bb	aa	aa			PASS		HEMIZ_GAP	transition(C>T)	GCT	known-T	-	9,9,22,9	1.000	F->D&S	33162070-33162434
6	33162378	identical	wrong	T	aa	bb	aa	aa			PASS		HEMIZ_GAP	transition(T>C)	CTT	known-C	-	9,11,29,14	1.000	F->D&S	33162070-33162434
6	33162382	identical	wrong	A	aa	bb	aa	aa			PASS		HEMIZ_GAP	transition(A>G)	AAC	known-G	-	9,10,29,15	1.000	F->D&S	33162070-33162434
6	33162388	identical	wrong	A	aa	bb	aa	aa			PASS		HEMIZ_GAP	transversion(A>C)	CAA	known-C	-	9,12,31,18	1.000	F->D&S	33162070-33162434
6	155162951	nonidentical	wrong	G	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transversion(G>C)	tgt	known-C	33,45,45,92	10,14,14,13	0.881	M->D	155157980-155169655
7	6882235	haplo-paternal	wrong	G	aa	bb	bb	ab	PASS		PASS	ab,bb,bb,ab	false call	transversion(C>G)	gga	rs62440041	48,69,42,179	15,22,13,24	0.830	M->D	
7	28541322	haplo-paternal	wrong	C	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP	transition(C>T)	TCG	known-T	-	12,12,8,38	0.967	M->S	28540803-28542217
7	32742340	haplo-paternal	wrong	C	aa	bb	ab	bb			PASS		HEMIZ_GAP?	transversion(A>C)	gca	known-A	-	12,9,20,38	0.522	M->S	
7	39514585	haplo-paternal	wrong	C	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(C>T)	ccc	known-T	-	12,14,13,59	1.000	M->S	39511467-39518375
7	70059072	haplo-paternal,error	wrong	C	aa	bb	bb	ab			PASS		HEMIZ_GAP	transition(T>C)	gcc	known-T	-	12,13,10,16	0.942	M->D	70057949-70065158
7	70059098	haplo-paternal,error	wrong	C	aa	bb	bb	ab		PASS	PASS		HEMIZ_GAP	transition(C>T)	ccc	known-T	-	12,12,9,13	0.942	M->D	70057949-70065158
7	70059099	haplo-paternal,error	wrong	C	aa	bb	bb	ab			PASS		HEMIZ_GAP	transition(T>C)	cct	known-T	-	12,12,9,13	0.942	M->D	70057949-70065158
7	70060806	haplo-paternal,error	wrong	A	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(A>G)	GAT	known-G	120,72,82,230	39,23,38,46	0.862	M->D	70057949-70065158
7	70060843	haplo-paternal,error	wrong	A	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(A>C)	CAC	known-C	154,50,76,230	50,27,37,51	0.862	M->D	70057949-70065158
7	70060872	haplo-paternal,error	wrong	A	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(A>G)	CAA	known-G	120,63,99,229	39,20,32,42	0.862	M->D	70057949-70065158
7	70062695	haplo-paternal,error	wrong	G	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(A>G)	GGG	known-A	42,36,66,163	13,11,21,23	0.661	M->D	70057949-70065158
7	97238835	haplo-maternal,error	wrong	T	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(C>T)	ata	known-C	-	12,21,8,8	0.956	F->D	97228109-97242753
7	97239610	haplo-maternal,error	wrong	C	ab	aa	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	ACA	known-T	202,54,90,203	43,17,29,34	0.977	F->D	97228109-97242753
7	97239661	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transversion(T>A)	GAA	known-T	105,57,75,171	34,18,24,22	0.977	F->D	97228109-97242753
7	109971549	haplo-maternal	wrong	G	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP	transversion(G>T)	aga	known-T	-	9,13,11,12	0.976	F->D	109968561-109976070
7	133435897	nonidentical	wrong	A	aa	bb	bb	aa			PASS		HEMIZ_GAP?	transition(G>A)	GAA	known-G	-	12,22,18,31	0.844	F->S+M->D	
7	137550673	haplo-maternal,error	wrong	T	ab	aa	bb	ab		PASS	PASS		HEMIZ_GAP	transversion(T>G)	gtt	known-G	-	12,33,10,9	0.919	F->D	137549666-137565361
7	137550764	haplo-maternal,error	wrong	C	ab	aa	bb	ab	PASS				HEMIZ_GAP	transition(C>T)	tca	known-T	59,30,36,111	16,9,11,16	0.919	F->D	137549666-137565361
7	137551798	haplo-maternal,error	wrong	A	ab	aa	bb	ab		PASS	PASS		HEMIZ_GAP	transition(A>G)	cac	known-G	-	12,25,8,13	0.686	F->D	137549666-137565361
7	137552113	haplo-maternal,error	wrong	A	ab	aa	bb	ab	PASS	PASS			HEMIZ_GAP	transition(A>G)	aac	known-G	159,30,39,72	20,9,12,21	0.926	F->D	137549666-137565361
7	137553173	haplo-maternal,error	wrong	C	ab	aa	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	act	known-T	112,36,39,53	18,11,12,7	0.966	F->D	137549666-137565361
7	137562108	haplo-maternal,error	wrong	A	ab	aa	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(A>T)	GAC	known-T	135,42,93,134	28,13,30,28	0.969	F->D	137549666-137565361
7	137562134	haplo-maternal,error	wrong	G	ab	aa	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	CGT	known-A	164,48,90,77	31,15,29,26	0.811	F->D	137549666-137565361
7	137563369	haplo-maternal,error	wrong	C	ab	aa	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	ACG	known-T	255,81,102,136	41,26,33,32	0.883	F->D	137549666-137565361
7	137563472	haplo-maternal,error	wrong	C	ab	aa	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	ACG	known-T	177,78,96,255	37,25,31,39	0.883	F->D	137549666-137565361
7	141700574	haplo-maternal,error	wrong	C	ab	aa	ab	bb	PASS		PASS		HEMIZ_GAP	transition(T>C)	ACA	known-T	233,63,255,69	39,20,51,22	0.978	F->S	141692397-141720285
7	156086493	nonidentical,error	wrong	G	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(A>G)	cgg	known-A	30,66,51,138	9,21,16,21	1.000	M->D	156082795-156087439
7	156086555	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transversion(A>C)	ACC	known-A	45,96,78,164	14,31,25,27	1.000	M->D	156082795-156087439
7	156086573	nonidentical,error	wrong	A	aa	bb	bb	ab			PASS		HEMIZ_GAP	transition(G>A)	TAC	known-G	-	12,30,38,36	1.000	M->D	156082795-156087439
7	156086611	nonidentical,error	wrong	G	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(A>G)	CGT	known-A	48,63,72,89	15,20,23,20	1.000	M->D	156082795-156087439
7	156086879	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(T>C)	GCA	known-T	36,57,60,110	11,18,19,19	1.000	M->D	156082795-156087439
8	4787721	haplo-maternal	wrong	G	aa	bb	bb	bb			PASS		HEMIZ_GAP?	transition(G>A)	TGG	known-A	-	12,17,18,32	0.967	M->D&S	
8	72378421	haplo-maternal	wrong	T	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP	transition(T>C)	GTC	known-C	-	9,20,8,12	0.985	F->D	72376588-72380735
8	72379408	haplo-maternal	wrong	T	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP	transition(T>C)	TTA	known-C	-	12,17,9,15	0.953	F->D	72376588-72380735
8	72379640	haplo-maternal	wrong	C	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>G)	CCA	known-G	132,84,96,137	43,27,31,28	0.953	F->D	72376588-72380735
8	72379654	haplo-maternal	wrong	C	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	CCG	known-T	129,87,90,183	42,28,29,33	0.953	F->D	72376588-72380735
8	87261870	haplo-maternal	wrong	G	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(A>G)	AGA	known-A	-	12,56,9,37	0.987	F->D	87257297-87263366
8	96946563	haplo-maternal	wrong	G	ab	aa	ab	bb			PASS		HEMIZ_GAP	transition(G>A)	TGT	known-A	-	12,24,9,26	0.997	F->S	96944008-96948971
8	97590332	haplo-maternal	wrong	A	aa	ab	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(A>G)	GAT	known-G	60,163,87,36	19,31,28,11	1.000	M->D&S	97589623-97591684
8	98264672	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	GAT	known-G	93,39,72,134	30,12,23,18	0.979	F->D	98256771-98288114
8	98268139	haplo-maternal,error	wrong	G	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transversion(T>G)	AGG	known-T	75,30,66,131	24,9,21,18	1.000	F->D	98256771-98288114
8	98275606	haplo-maternal,error	wrong	G	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(A>G)	CGG	known-A	52,42,69,143	25,13,22,25	1.000	F->D	98256771-98288114
8	119666561	haplo-paternal	wrong	A	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP?	transition(A>G)	tac	known-G	-	12,21,13,44	0.976	M->S	
9	22489958	haplo-paternal	wrong	G	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(G>A)	agt	known-A	-	12,26,12,58	1.000	M->S	22483845-22498806
9	23363293	haplo-paternal,error	wrong	A	aa	bb	ab	bb			PASS		HEMIZ_GAP	transversion(C>G)	TAA	known-CG	-	12,19,8,53	1.000	M->S	23359797-23367822
9	23363305	haplo-paternal,error	wrong	G	aa	bb	ab	bb			PASS		HEMIZ_GAP	transversion(G>C)	AGT	known-C	-	12,26,9,51	1.000	M->S	23359797-23367822
9	23363327	haplo-paternal,error	wrong	T	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(T>C)	TTT		-	12,37,11,46	1.000	M->S	23359797-23367822
9	23366126	haplo-paternal,error	wrong	G	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP	transition(G>A)	TGA	known-A	-	10,28,14,67	1.000	M->S	23359797-23367822
9	23366167	haplo-paternal,error	wrong	A	aa	bb	ab	bb			PASS		HEMIZ_GAP	transversion(T>A)	GAG	known-T	-	12,29,16,50	1.000	M->S	23359797-23367822
9	43595358	haplo-paternal,error	wrong	T	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(C>T)	CTC	known-C	33,48,45,40	10,15,14,18	0.473	M->D	43539394-43721183
10	813515	nonidentical	wrong	G	aa	bb	aa	bb			PASS		HEMIZ_GAP?	transition(A>G)	CGG		-	10,57,119,83	0.572	F->D+M->S	
10	56354118	haplo-paternal	wrong	C	aa	ab	ab	bb	PASS	PASS			HEMIZ_GAP	transition(C>T)	gca	known-T	36,139,209,36	17,17,30,11	0.977	M->S	56352709-56355223
10	65179827	nonidentical	wrong	A	aa	bb	ab	aa	PASS		PASS		HEMIZ_GAP	transition(G>A)	AAG	known-G	81,36,243,42	26,11,34,13	0.902	F->S	65179138-65183450
10	65180980	nonidentical	wrong	T	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(C>T)	TTA	known-C	-	12,44,10,39	0.790	F->S	65179138-65183450
10	134431510	identical	wrong	T	aa	bb	aa	ab	PASS		PASS		FALSE_CALL	transition(C>T)	TTC	rs12766706	228,141,187,128	88,46,61,54	0.846	none	
11	18909917	haplo-paternal	wrong	T	aa	bb	bb	ab			PASS		HEMIZ_GAP?	transition(C>T)	ATC	known-C	-	12,16,19,44	0.955	M->D	
11	18913266	haplo-paternal,error	wrong	G	aa	ab	bb	ab	PASS		PASS		HEMIZ_GAP?	transition(A>G)	GGT	known-A	30,136,90,197	9,29,29,29	0.925	M->D	
11	18915492	haplo-paternal,error	wrong	A	aa	ab	bb	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	GAT	known-G	39,90,75,164	12,18,24,24	0.959	M->D	18914136-18918114
11	18916086	haplo-paternal,error	wrong	G	aa	bb	bb	ab	PASS		PASS		HEMIZ_GAP	transition(A>G)	GGA	known-A	51,93,129,7	16,30,42,25	0.959	M->D	18914136-18918114
11	69759121	haplo-paternal,error	wrong	C	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	ACG	known-T	48,30,126,42	15,20,22,13	0.936	M->S	69750913-69761420
11	69759313	haplo-paternal,error	wrong	T	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP	transition(T>C)	ctg	known-C	-	12,33,20,64	0.936	M->S	69750913-69761420
11	69759869	haplo-paternal,error	wrong	C	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP	transition(C>T)	ACG	known-T	-	12,20,23,72	0.936	M->S	69750913-69761420
11	81182373	haplo-paternal,error	wrong	C	aa	bb	aa	aa	PASS		PASS		HEMIZ_GAP	transition(T>C)	tcc	known-T	93,42,66,42	30,13,21,13	0.820	F->D&S	81177390-81201014
11	81190729	haplo-paternal,error	wrong	C	aa	bb	aa	aa			PASS		HEMIZ_GAP	transversion(A>C)	CCC	known-A	-	12,57,8,37	0.880	F->D&S	81177390-81201014
11	81190886	haplo-paternal,error	wrong	T	aa	bb	aa	aa	PASS		PASS		HEMIZ_GAP	transition(C>T)	gtt		73,45,72,60	36,14,23,19	0.880	F->D&S	81177390-81201014
11	100949993	haplo-maternal	wrong	T	aa	ab	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transversion(T>G)	gtc	known-G	57,96,57,12	18,13,18,3	0.973	M->D&S	100949203-100951017
11	103421923	haplo-maternal	wrong	C	aa	bb	bb	bb			PASS		HEMIZ_GAP	transversion(G>C)	GCA	known-G	-	12,13,15,14	0.992	M->D&S	103420224-103423949
11	134238929	haplo-paternal	wrong	C	ab	aa	aa	bb			PASS		HEMIZ_GAP?	transition(C>T)	TCC	known-T	-	12,80,27,54	1.000	F->D&S	
12	5092346	nonidentical	wrong	T	ab	aa	aa	bb			PASS		HEMIZ_GAP	transversion(G>T)	GTA	known-G	-	12,28,8,52	1.000	F->S	5091979-5093148
12	5093186	nonidentical	wrong	G	ab	aa	aa	bb		PASS	PASS		HEMIZ_GAP	transition(G>A)	TGA	known-A	-	12,29,14,57	0.977	F->S	5093150-5094168
12	46996539	haplo-maternal	wrong	G	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP	transition(G>A)	agt	known-A	-	9,10,12,10	0.716	F->D	46994836-46998133
12	58224013	nonidentical,error	wrong	C	aa	bb	bb	ab		PASS	PASS		HEMIZ_GAP	transition(C>T)	tcg	known-T	-	9,10,16,12	0.991	M->D	58221716-58236099
12	58224093	nonidentical,error	wrong	C	aa	bb	bb	ab		PASS	PASS		HEMIZ_GAP	transversion(C>G)	gcg	known-G	-	12,21,13,20	0.991	M->D	58221716-58236099
12	58224164	nonidentical,error	wrong	T	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(T>G)	ctc	known-G	39,39,48,121	12,12,15,18	0.991	M->D	58221716-58236099
12	58224232	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	cca	known-T	39,30,60,171	12,9,19,18	0.991	M->D	58221716-58236099
12	58224603	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS	PASS			HEMIZ_GAP	transition(C>T)	acc	known-T	48,36,54,98	15,11,17,10	0.991	M->D	58221716-58236099
12	58225778	nonidentical,error	wrong	T	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	gta	known-C	51,45,48,199	16,14,15,24	1.000	M->D	58221716-58236099
12	58226650	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>G)	gca	known-G	60,45,63,59	19,14,20,15	1.000	M->D	58221716-58236099
12	58226746	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>A)	tca	known-A	39,60,42,136	12,19,13,18	0.997	M->D	58221716-58236099
12	58230898	nonidentical,error	wrong	C	aa	bb	bb	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>G)	gca	known-G	30,39,39,24	9,12,12,16	0.992	M->D	58221716-58236099
12	69164231	haplo-maternal,error	wrong	C	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transversion(G>C)	TCT	known-G	59,30,69,145	30,9,22,15	1.000	F->D	69156724-69165666
12	69164309	haplo-maternal,error	wrong	T	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(T>A)	TTT	known-A	63,30,48,138	20,9,15,16	1.000	F->D	69156724-69165666
13	23529796	nonidentical	wrong	A	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(A>G)	TAA	known-G	-	9,15,8,15	1.000	F->D	23528849-23531670
13	23531050	nonidentical	wrong	C	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>A)	tct	known-A	81,36,48,102	26,11,15,20	0.849	F->D	23528849-23531670
13	56655119	haplo-paternal,error	wrong	C	ab	aa	aa	bb	PASS		PASS		HEMIZ_GAP	transition(T>C)	tct	known-T	133,42,39,39	21,13,12,12	0.998	F->D&S	56649950-56662942
13	56672141	haplo-paternal,error	wrong	C	ab	aa	aa	bb			PASS		HEMIZ_GAP	transition(T>C)	tcc	known-T	-	12,37,9,27	0.997	F->D&S	56662944-56690115
13	69692046	haplo-paternal	wrong	C	ab	aa	bb	ab	PASS				FALSE_CALL	transition(C>T)	TCA	known-T	123,30,30,42	15,9,9,6	0.985	none	
13	82064679	haplo-paternal	wrong	G	aa	bb	ab	bb	PASS		PASS		HEMIZ_GAP	transition(A>G)	aga	known-A	30,75,191,42	15,24,31,13	1.000	M->S	82061919-82072569
13	110386790	haplo-maternal	wrong	A	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(A>G)	gat	known-G	-	12,20,11,30	0.885	F->S	110384132-110387204
13	113100471	haplo-maternal,error	wrong	G	ab	aa	ab	bb		PASS	PASS		HEMIZ_GAP	transition(G>A)	cgc	known-A	-	12,43,8,57	0.840	F->S	113098266-113102491
14	80949221	haplo-maternal	wrong	C	aa	ab	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	CCC	known-T	96,225,96,60	31,32,31,19	0.983	M->D&S	80947797-80951487
14	105622055	haplo-maternal,error	wrong	T	aa	bb	ab	aa	PASS		PASS		HEMIZ_GAP?	transition(C>T)	ATA	known-C	57,36,255,42	18,11,40,13	0.917	F->S	
14	105841573	haplo-maternal,error	wrong	C	aa	bb	ab	bb	PASS				FALSE_CALL	transition(T>C)	TCA	known-T	39,138,55,35	12,45,37,25	0.989	none	
14	105892063	haplo-maternal,error	wrong	T	aa	bb	ab	aa	PASS		PASS		HEMIZ_GAP?	transversion(G>T)	att		90,42,224,63	29,13,48,20	0.622	F->S	
14	105951746	haplo-maternal,error	wrong	G	aa	ab	bb	ab			PASS		FALSE_CALL	transition(G>A)	GGT	known-A	-	12,23,35,8	0.970	none	
14	105951964	haplo-maternal,error	wrong	C	aa	ab	bb	ab			PASS		FALSE_CALL	transition(C>T)	cct	known-T	-	12,28,43,26	0.970	none	
14	106087206	haplo-maternal	wrong	G	aa	bb	aa	ab			PASS		HEMIZ_GAP?	transition(A>G)	TGT	known-A	-	12,51,23,40	0.985	F->D	
14	106225110	haplo-maternal	wrong	G	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP?	transversion(T>G)	cgt	known-T	-	12,31,9,30	0.970	F->D	
14	106244864	identical	wrong	C	ab	aa	bb	ab			PASS		HEMIZ_GAP?	transition(T>C)	cct	known-T	-	12,25,14,29	0.961	F->D	
15	30298305	haplo-paternal,error	wrong	T	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(T>C)	ttc	known-C	-	12,8,11,26	0.984	M->S	30291274-30305140
15	60170447	nonidentical	wrong	T	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	gtg	known-C	60,63,251,54	19,20,44,17	0.887	M->S	60109584-60175610
15	60173987	nonidentical,error	wrong	G	aa	ab	aa	bb			PASS		HEMIZ_GAP	transversion(G>T)	TGT	known-T	-	12,18,18,67	1.000	M->S	60109584-60175610
15	60176770	nonidentical,error	wrong	C	aa	ab	aa	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	ACC	known-T	36,209,114,36	19,26,37,11	1.000	M->S	60175612-60214002
15	60178713	nonidentical,error	wrong	C	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(C>T)	ACT	known-T	-	12,18,18,48	0.799	M->S	60175612-60214002
15	60178900	nonidentical,error	wrong	C	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	CCA	known-T	63,36,255,33	20,22,58,10	0.799	M->S	60175612-60214002
15	60178929	nonidentical,error	wrong	C	aa	ab	aa	bb			PASS		HEMIZ_GAP	transversion(C>A)	GCA	known-A	-	12,50,27,102	0.799	M->S	60175612-60214002
15	60179195	nonidentical,error	wrong	C	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP	transversion(C>G)	ACA	known-G	-	12,16,16,51	0.799	M->S	60175612-60214002
15	60181556	nonidentical,error	wrong	G	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transversion(G>C)	GGC	known-C	51,54,202,36	16,17,35,11	0.886	M->S	60175612-60214002
15	60181616	nonidentical,error	wrong	A	aa	ab	aa	bb			PASS		HEMIZ_GAP	transition(A>G)	TAT	known-G	-	12,16,30,61	0.886	M->S	60175612-60214002
15	60181631	nonidentical,error	wrong	G	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	TGA	known-A	39,45,255,30	12,14,36,9	0.886	M->S	60175612-60214002
15	60181677	nonidentical,error	wrong	C	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	CCA	known-T	48,60,243,45	15,19,34,14	0.886	M->S	60175612-60214002
15	60181982	nonidentical,error	wrong	C	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>G)	gct	known-G	69,78,178,33	22,25,41,10	0.886	M->S	60175612-60214002
15	60183481	nonidentical,error	wrong	C	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transversion(C>A)	tca	known-A	54,51,255,30	17,16,38,9	0.997	M->S	60175612-60214002
15	60184234	nonidentical,error	wrong	G	aa	bb	ab	bb		PASS	PASS		HEMIZ_GAP	transition(G>A)	CGT	known-A	-	12,19,18,52	1.000	M->S	60175612-60214002
15	60184410	nonidentical,error	wrong	C	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(C>T)	gcg	known-T	-	12,19,27,52	1.000	M->S	60175612-60214002
15	60184526	nonidentical,error	wrong	G	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(G>A)	CGC	known-A	-	12,11,26,36	1.000	M->S	60175612-60214002
15	60190629	nonidentical,error	wrong	G	aa	ab	aa	bb	PASS	PASS			HEMIZ_GAP	transition(G>A)	CGC	known-A	54,74,120,45	17,18,39,14	1.000	M->S	60175612-60214002
15	60193654	nonidentical,error	wrong	G	aa	bb	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	cgt	known-A	33,36,68,30	10,11,18,9	0.993	M->S	60175612-60214002
15	60201306	nonidentical,error	wrong	C	aa	bb	ab	bb			PASS		HEMIZ_GAP	transition(C>T)	GCC	known-T	-	12,14,12,44	0.993	M->S	60175612-60214002
15	60205478	nonidentical,error	wrong	G	aa	bb	ab	bb			PASS		HEMIZ_GAP	transversion(G>T)	GGA	known-T	-	12,19,18,33	0.948	M->S	60175612-60214002
15	61054989	nonidentical	wrong	G	aa	bb	aa	ab			PASS		HEMIZ_GAP	transversion(T>G)	CGT	known-T	-	12,35,9,21	1.000	F->D	61054165-61056341
15	61056089	nonidentical	wrong	A	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(G>A)	AAG	known-G	-	12,22,9,17	0.985	F->D	61054165-61056341
15	61056153	nonidentical	wrong	C	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(T>C)	GCG	known-T	-	9,9,8,14	0.985	F->D	61054165-61056341
15	82334525	haplo-maternal	wrong	T	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	ctc	known-C	123,57,70,84	40,18,34,33	1.000	F->D	82331734-82335408
15	82334619	haplo-maternal	wrong	G	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	GGT	known-A	114,57,81,182	37,18,26,28	1.000	F->D	82331734-82335408
15	87861562	nonidentical	wrong	T	ab	aa	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	TTC	known-C	167,30,41,42	27,9,20,13	0.972	F->D	87860435-87863362
16	3057122	haplo-maternal	wrong	T	ab	aa	bb	ab			PASS		HEMIZ_GAP	transversion(T>A)	CTG	known-A	-	10,39,44,38	0.837	F->D	3057040-3057937
16	5120241	haplo-maternal	wrong	T	aa	bb	aa	ab		PASS	PASS		HEMIZ_GAP	transition(T>C)	CTT	known-C	-	12,26,9,23	0.699	F->D	5119904-5121192
16	22955473	identical,compression	wrong	C	aa	bb	aa	aa			PASS		HEMIZ_GAP	transition(C>T)	GCA	known-T	-	9,8,10,13	1.000	F->D&S	22955188-22957477
16	28526046	identical	wrong	G	aa	bb	bb	bb		PASS	PASS		HEMIZ_GAP?	transversion(G>T)	agc	known-T	-	9,18,9,15	0.878	M->D&S	
16	54374871	identical,error	wrong	A	aa	bb	bb	bb	PASS		PASS		HEMIZ_GAP?	transversion(T>A)	AAG	known-T	36,42,48,39	11,13,15,12	0.841	M->D&S	
16	87167250	nonidentical	wrong	G	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(G>A)	CGA	known-A	102,30,66,138	33,9,21,21	0.951	F->D	87165472-87169847
16	87167371	nonidentical	wrong	A	aa	bb	aa	ab	PASS	PASS	PASS		HEMIZ_GAP	transition(A>G)	CAT	known-G	93,36,51,192	30,11,16,28	0.951	F->D	87165472-87169847
16	88424335	nonidentical	wrong	G	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(A>G)	AGG	known-A	-	9,21,8,29	1.000	F->S	88423925-88424649
16	88424433	nonidentical	wrong	T	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(C>T)	CTA	known-C	-	12,33,13,46	1.000	F->S	88423925-88424649
17	8187637	identical,compression	wrong	C	aa	bb	aa	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	cca	known-T	45,45,54,30	14,14,17,9	0.754	F->D&S	8187251-8191258
17	8188378	identical,compression	wrong	A	aa	bb	aa	aa		PASS	PASS		HEMIZ_GAP	transversion(A>C)	tac	known-C	-	9,9,8,13	0.700	F->D&S	8187251-8191258
17	13473207	haplo-paternal	wrong	C	ab	aa	bb	aa		PASS	PASS		HEMIZ_GAP?	transition(C>T)	TCA	known-T	-	9,34,11,16	0.887	F->D&S	
17	51515660	haplo-maternal,error	wrong	T	ab	aa	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(T>C)	TTT	known-C	255,90,255,34	51,29,60,19	1.000	F->S	51514815-51528584
17	51515705	haplo-maternal,error	wrong	G	ab	aa	ab	bb	PASS	PASS	PASS		HEMIZ_GAP	transversion(G>T)	TGC	known-T	255,63,255,36	53,20,53,22	1.000	F->S	51514815-51528584
18	45951070	haplo-maternal	wrong	G	aa	bb	ab	aa			PASS		HEMIZ_GAP	transversion(G>C)	gga	known-C	-	12,44,14,59	1.000	F->S	45947960-45954344
18	61876078	nonidentical	wrong	C	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(T>C)	GCC		-	9,34,9,25	1.000	F->D	61874378-61883394
18	61882719	nonidentical	wrong	A	ab	aa	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transversion(A>T)	TAT	known-T	143,30,36,36	17,9,11,11	1.000	F->D	61874378-61883394
18	61918040	nonidentical	wrong	C	aa	bb	bb	aa	PASS		PASS		HEMIZ_GAP	transversion(A>C)	GCA	known-A	53,57,87,66	28,18,28,21	1.000	F->S+M->D	61916835-61920812
18	61918096	nonidentical	wrong	A	aa	bb	bb	aa	PASS		PASS		HEMIZ_GAP	transversion(T>A)	CAT	known-T	66,51,66,45	21,16,21,14	1.000	F->S+M->D	61916835-61920812
18	62060697	nonidentical	wrong	G	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transversion(C>G)	TGT	known-C	78,54,87,109	25,17,28,22	1.000	F->D	62057659-62063074
18	62061688	nonidentical	wrong	C	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(T>C)	aca	known-T	-	12,40,11,12	1.000	F->D	62057659-62063074
18	65144889	nonidentical	wrong	C	aa	bb	ab	aa			PASS		HEMIZ_GAP	transition(T>C)	gcc	known-T	-	12,51,13,69	1.000	F->S	65143447-65145902
19	40547663	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	caa	known-G	108,51,105,223	35,16,34,28	0.830	F->D	40540180-40556481
19	40547693	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	caa	known-G	93,39,69,223	30,12,22,27	0.830	F->D	40540180-40556481
19	40548112	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	TAT	known-G	75,39,60,155	24,12,19,21	0.830	F->D	40540180-40556481
19	40548231	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transversion(T>A)	CAC	known-T	69,42,51,74	22,13,16,22	0.830	F->D	40540180-40556481
19	40548529	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transition(G>A)	tag	known-G	151,48,135,131	49,15,44,35	0.993	F->D	40540180-40556481
19	40550323	haplo-maternal,error	wrong	T	aa	bb	aa	ab			PASS		HEMIZ_GAP	transition(C>T)	att	known-C	-	9,41,10,37	0.776	F->D	40540180-40556481
19	40550339	haplo-maternal,error	wrong	A	aa	bb	aa	ab	PASS		PASS		HEMIZ_GAP	transversion(T>A)	aag	known-T	87,33,87,180	28,10,28,25	0.776	F->D	40540180-40556481
19	56825675	haplo-maternal,error	wrong	T	aa	bb	bb	bb	PASS		PASS		HEMIZ_GAP	transversion(G>T)	atc	known-G	30,36,36,9	9,11,11,2	0.671	M->D&S	56824238-56842412
19	56827588	haplo-maternal,error	wrong	G	aa	ab	aa	bb		PASS	PASS		HEMIZ_GAP	transversion(G>T)	cga	known-T	-	12,12,16,22	0.871	M->D&S	56824238-56842412
19	56831802	haplo-maternal,error	wrong	G	aa	ab	bb	aa		PASS	PASS		HEMIZ_GAP	transition(G>A)	AGA	known-A	-	9,8,20,12	0.821	M->D&S	56824238-56842412
19	56832974	haplo-maternal,error	wrong	A	aa	ab	bb	aa	PASS	PASS	PASS		HEMIZ_GAP	transition(A>G)	CAT	known-G	63,191,54,16	20,24,17,15	1.000	M->D&S	56824238-56842412
19	56834666	haplo-maternal,error	wrong	G	aa	ab	bb	aa	PASS	PASS			HEMIZ_GAP	transversion(G>T)	ggt	known-T	39,51,51,24	12,9,16,7	0.988	M->D&S	56824238-56842412
19	56839406	haplo-maternal,error	wrong	T	aa	bb	bb	bb			PASS		HEMIZ_GAP	transversion(G>T)	GTC	known-G	-	12,8,13,23	1.000	M->D&S	56824238-56842412
19	56839781	haplo-maternal,error	wrong	C	aa	ab	aa	bb	PASS	PASS	PASS		HEMIZ_GAP	transition(C>T)	GCG	known-T	99,215,90,39	32,35,38,12	1.000	M->D&S	56824238-56842412
19	56839896	haplo-maternal,error	wrong	G	aa	bb	bb	bb	PASS		PASS		HEMIZ_GAP	transversion(C>G)	GGG	known-C	66,90,50,60	21,36,27,19	1.000	M->D&S	56824238-56842412
19	56840053	haplo-maternal,error	wrong	C	aa	bb	bb	bb	PASS		PASS		HEMIZ_GAP	transversion(G>C)	TCG	known-G	72,102,67,36	23,33,34,11	1.000	M->D&S	56824238-56842412
19	56840114	haplo-maternal,error	wrong	A	aa	ab	aa	bb	PASS	PASS	PASS		HEMIZ_GAP	transversion(A>C)	gac	known-C	45,121,60,42	14,18,19,13	1.000	M->D&S	56824238-56842412
19	59249210	nonidentical	wrong	C	aa	ab	aa	bb	PASS				HEMIZ_GAP	transition(T>C)	GCT	known-T	33,43,73,39	10,10,31,12	1.000	M->S	59247207-59252495
19	59250872	nonidentical	wrong	A	aa	ab	aa	bb			PASS		HEMIZ_GAP	transition(G>A)	GAG	known-G	-	12,12,23,59	0.878	M->S	59247207-59252495
20	62246049	haplo-paternal	wrong	A	aa	bb	ab	bb			PASS		HEMIZ_GAP?	transition(G>A)	tat	known-G	-	12,46,98,16	0.979	M->D	
22	17007730	haplo-paternal	wrong	C	ab	aa	bb	aa			PASS		HEMIZ_GAP	transversion(C>G)	TCC	known-G	-	12,20,10,15	0.939	F->D&S	17005520-17009557
22	22604607	identical,error	wrong	C	ab	aa	bb	bb	dtr only		son only		HEMIZ_GAP	transition(T>C)	aca	known-T	185,30,54,27	30,9,17,8	0.960	F->D&S	22603286-22615061
22	22658178	identical,error	wrong	A	aa	bb	aa	aa			PASS		HEMIZ_GAP?	transition(G>A)	CAT	known-G	-	9,15,9,13	0.699	F->D&S	
22	25347435	identical	wrong	C	aa	ab	bb	bb	PASS		PASS		HEMIZ_GAP	transversion(G>C)	gca	known-G	39,184,78,15	12,22,25,4	1.000	M->D&S	25344468-25359315
22	25351457	identical	wrong	T	aa	ab	bb	bb	PASS				HEMIZ_GAP	transition(C>T)	TTG	known-C	33,39,48,24	10,8,15,7	0.897	M->D&S	25344468-25359315
22	47253858	haplo-maternal	wrong	T	aa	bb	ab	aa			PASS		HEMIZ_GAP?	transition(C>T)	CTG	known-C	-	11,83,23,55	0.880	F->S	