

**Supplementary Table 2.** Copy number variants identified by array comparative genomic hybridization.

CASE	SEX	CNV - ISCN 2020	SIZE	CNV CLASSIFICATION	GENES	Genes of Interest	SFARI score	TYPE OF GENE REARRANGEMENT
A003	M	13q14.13q14.2(47240527_48096722)x1 pat	856.2 kb	VOUS	<i>LRCH1</i>		//	INT START
A003					<i>ESD</i>		//	DELETED
A003					<i>HTR2A</i>	<i>HTR2A</i>	//	DELETED
A006	M	13q12.11(20146801_20270834)x3 pat	124.03 kb	VOUS	<i>MPHOSPH8</i>	<i>MPHOSPH8</i>	//	DUPLICATED
A006					<i>PSPC1</i>		//	INT END
A006		13q12.11(20411945_20559030)x3 pat	147.09 kb	VOUS	<i>ZMYM5</i>	<i>ZMYM5</i>	//	INT START
A006					<i>ZMYM2</i>	<i>ZMYM2</i>	S	INT END
A006		17q21.31(41409849_41597925)x3 mat	188.08 kb	VOUS	<i>DHX8</i>	<i>DHX8</i>	//	INT END
A013	M	7q11.22(69168540_69198438)x1 mat	29.9 kb	LP	<i>AUTS2</i>	<i>AUTS2</i>	1	INTRAGENIC
A016	M	16p13.11(14968878_16311041)X1 dn	1.34 Mb	LP	<i>NOMO1</i>		//	INT START
A016					<i>NPIPA1</i>		//	DELETED
A016					<i>PDXDC1</i>		//	DELETED
A016					<i>NTAN1</i>		//	DELETED
A016					<i>RRN3</i>		//	DELETED
A016					<i>MPV17L</i>		//	DELETED
A016					<i>MARF1</i>		//	DELETED
A016					<i>NDE1</i>	<i>NDE1</i>	//	DELETED
A016					<i>MYH11</i>		//	DELETED
A016					<i>FOPNL</i>		//	DELETED
A016					<i>ABCC1</i>		//	DELETED
A016					<i>ABCC6</i>		//	INT END
A017	M	16q21(60064996_63555913)x1 mat	3.49 Mb	LP	<i>CDH8</i>	<i>CDH8</i>	2	DELETED
A020	M	3q24(147111840_147118109)x3 dn	8.91 kb	VOUS	<i>ZIC1</i>	<i>ZIC1</i>	//	INTRAGENIC
A020					<i>ZIC4</i>		//	INTRAGENIC
A021	F	15q13.1(29656854_29783953)x1 pat	127.1 kb	VOUS	<i>FAM189A1</i>	<i>FAM189A1</i>	//	INTRAGENIC
A022	M	Xp22.33(426261_679415)x2 mat	253.16 kb	LP	<i>SHOX</i>	<i>SHOX</i>	2	DUPLICATED
A025	M	16q23.3(82184809_83663330)x3 mat	1.48 Mb	VOUS	<i>CDH13</i>	<i>CDH13</i>	2	INT END
A025					<i>MPHOSPH6</i>		//	INT START
A029	F	7q21.11(81472446_81639364)x3 pat	166.92 kb	VOUS	<i>CACNA2D1</i>	<i>CACNA2D1</i>	2	INT END
A043	M	16q23.2(80751184_80928051)x1 mat	176.87 kb	VOUS	<i>CDYL2</i>	<i>CDYL2</i>	//	INT START
A045	M	Xq21.1(77081624_77139044)x2 mat	57.42 kb	VOUS	<i>MAGT1</i>	<i>MAGT1</i>	//	INT END
A050	F	1q21.1q21.2(146542653_147872312)x1 pat	1.33 Mb	LP	<i>PRKAB2</i>		//	DELETED
A050					<i>FMOS</i>		//	DELETED
A050					<i>BCL9</i>		//	DELETED
A050					<i>CHD1L</i>		//	DELETED
A050					<i>ACP6</i>		//	DELETED
A050					<i>GJA5</i>		//	DELETED
A050					<i>GJA8</i>		//	DELETED
A050					<i>GPR89B</i>		//	DELETED
A054	M	1q21.1q21.2(146499008_147860611)x3 pat	1.36 Mb	LP	<i>PRKAB2</i>		//	DUPLICATED
A054					<i>FMOS</i>		//	DUPLICATED
A054					<i>BCL9</i>		//	DUPLICATED
A054					<i>CHD1L</i>		//	DUPLICATED
A054					<i>ACP6</i>		//	DUPLICATED
A054					<i>GJA5</i>		//	DUPLICATED
A054					<i>GJA8</i>		//	DUPLICATED

A054				<i>GPR89B</i>		//	DUPLICATED
A060	M	6q22.31(124068036_124449980)x3 mat	382 Kb	<i>NKAIN2</i>	<i>NKAIN2</i>	//	INT END
A060		11q25(133124721_134353783)x3 mat	1.23 Mb	<i>OPCML</i>		//	INT START
A060				<i>SPATA19</i>		//	DUPLICATED
A060				<i>IGSF9B</i>		//	DUPLICATED
A060				<i>JAM3</i>		//	DUPLICATED
A060				<i>NCAPD3</i>		//	DUPLICATED
A060				<i>VPS26B</i>		//	DUPLICATED
A060				<i>THYN1</i>		//	DUPLICATED
A060				<i>ACAD8</i>		//	DUPLICATED
A060				<i>B3GAT1</i>		//	DUPLICATED
A060		Yp11.32(1421350_1634267)x2 pat	212.9 kb	<i>IL3RA</i>		//	INT START
A060				<i>SLC25A6</i>		//	DUPLICATED
A060				<i>ASMTL</i>		//	DUPLICATED
A060				<i>P2RY8</i>		//	DUPLICATED
A065	M	9q33.1(119387004_119527204)x1 mat	140.2 kb	<i>TRIM32</i>	<i>TRIM32</i>	3	DELETED
A065				<i>ASTN2</i>	<i>ASTN2</i>	2	INTRAGENIC
A065		10q23.1(84137861_84181161)x1 pat	43.3Kb	<i>NRG3</i>	<i>NRG3</i>	//	INTRAGENIC
A066	F	16q24.3(89428111_89453232)x3 pat	25.12 kb	<i>ANKRD11</i>	<i>ANKRD11</i>	1	INTRAGENIC
A078	M	5q11.2(51915987_53470988)x1 mat	1.56 Mb	<i>PELO</i>		//	DELETED
A078				<i>ITGA1</i>		//	DELETED
A078				<i>ITGA2</i>		//	DELETED
A078				<i>MOCS2</i>		//	DELETED
A078				<i>FST</i>		//	DELETED
A078				<i>NDUFS4</i>		//	DELETED
A078				<i>ARL15</i>		//	DELETED
A078		6q27(165421392_165801341)x3 pat	335.6 kb	<i>PDE10A</i>	<i>PDE10A</i>	//	INT END
A079	M	1p32.1(59947236_60012581)x1 mat	65.35 kb	<i>FGGY</i>	<i>FGGY</i>	//	INTRAGENIC
A080	M	6p21.32(32179815_32312148)x1 mat	132.33 Kb	<i>NOTCH4</i>	<i>NOTCH4</i>	//	DELETED
A080		11q14.1(84455989_84607402)x1 mat	151.4 Kb	<i>DLG2</i>	<i>DLG2</i>	2	INTRAGENIC
A082	M	15q11.2(25226260_25241828)x3 mat	15.57 kb	<i>SNURF</i>	<i>SNURF</i>	//	INTRAGENIC
A082				<i>SNHG14</i>		//	INTRAGENIC
A082		16p13.3(7041435_7132676)x1 pat	91.24 kb	<i>RBFOX1</i>	<i>RBFOX1</i>	2	INTRAGENIC
A088	M	Xp22.33(1189595_1383266)x2 o Yp11.32(1162459_1322464)x2	192.42	<i>CRLF2</i>	<i>CRLF2</i>	//	DUPLICATED
A093	M	7q36.3(158801633_158903310)x3 mat	101.68 kb	<i>VIPR2</i>	<i>VIPR2</i>	//	INT END
A095	M	Xp22.31(7532513_8115193)x2 mat	582.68 Kb	<i>VCX</i>		//	DUPLICATED
A095				<i>PNPLA4</i>		//	DUPLICATED
A097	M	Xp22.33(169791_537202)x2 mat	367.41 kb	<i>PLCXD1</i>		//	DUPLICATED
A097				<i>GTPBP6</i>		//	DUPLICATED
A097				<i>PPP2R3B</i>		//	DUPLICATED
A099	M	3q29(196418238_196487740)x3 pat	69.5kb	<i>PIGX</i>		//	INT START
A099				<i>PAK2</i>	<i>PAK2</i>	2	INT END
A107	M	13q14.11(43558077_43731680)x3 mat	173.6 kb	<i>EPSTI1</i>		//	INT START
A107				<i>DNAJC15</i>		//	DUPLICATED
A110	M	2q23.1(148805626_148936476)x1 mat	130.85 kb	<i>MBD5</i>	<i>MBD5</i>	1	INTRAGENIC
A113	M	13q12.11(20413829_20445336)x3 mat	31.51 Kb	<i>ZMYM5</i>	<i>ZMYM5</i>	//	INT START
A119	M	Yp11.32(771993_1322464)x2 pat	550 Kb	<i>CRLF2</i>	<i>CRLF2</i>	//	DUPLICATED
A120	M	8q24.3(144825929_144881529)x3 pat	55.6 Kb	<i>SCRIB</i>	<i>SCRIB</i>	//	INT END
A120		14q31.1(79388339_79657573)x1 dn	269.24 Kb	<i>NRXN3</i>	<i>NRXN3</i>	1	INTRAGENIC

A121	F	13q32.2(99177988_99271292)x3 pat	93.31 Kb	VOUS	<i>STK24</i>	<i>STK24</i>	//	INT START
A121	M	4q25(110390080_110653618)x3 mat	263.54 Kb	VOUS	<i>SEC24B</i>	<i>SEC24B</i>	//	INT START
A121					<i>CASP6</i>		//	DUPLICATED
A121					<i>PLA2G12A</i>		//	DUPLICATED
A121		4q25(113167151_113610549)x3 mat	443.4 Kb	VOUS	<i>AP1AR</i>		//	INT START
A121					<i>TIFA</i>		//	DUPLICATED
A121					<i>ALPK1</i>		//	DUPLICATED
A121					<i>NEUROG2</i>	<i>NEUROG2</i>	//	DUPLICATED
A121					<i>LARP7</i>		//	DUPLICATED
A124	M	1q21.1q21.2(145804790_147860611)x3 pat	2.06 Mb	LP	<i>GPR89A</i>		//	INT START
A124					<i>NBPF11</i>		//	DUPLICATED
A124					<i>HYDIN2</i>	<i>HYDIN2</i>	2	DUPLICATED
A124					<i>NBPF12</i>		//	DUPLICATED
A124					<i>PRKAB2</i>		//	DUPLICATED
A124					<i>FMOS</i>		//	DUPLICATED
A124					<i>BCL9</i>		//	DUPLICATED
A124					<i>CHD1L</i>		//	DUPLICATED
A124					<i>ACP6</i>		//	DUPLICATED
A124					<i>GJA5</i>		//	DUPLICATED
A124					<i>GJA8</i>		//	DUPLICATED
A124					<i>GPR89B</i>		//	DUPLICATED
A124		12q24.12q24.13(112184121_112302954)x3 pat	118.83 Kb	VOUS	<i>ACAD10</i>		//	INT START
A124					<i>ALDH2</i>		//	DUPLICATED
A124					<i>MAPKAPK5</i>		//	INT END
A125	M	Xq12(65768203_65926180)x2 mat	155.7 Kb	VOUS	<i>EDA2R</i>	<i>EDA2R</i>	//	DUPLICATED