

1 **Supplementary Table 1.** RefSeq genes in the deleted region

Order	Gene	Cytogenetic Loc	OMIM ID	OMIM Title	Inheritance	Disorders	CNS Expression
1	MEAF6	1p34.3	*611001	MYST/ESA1-ASSOCIATED FACTOR 6; MEAF6			Ubiquitous including brain
2	SNIP1	1p34.3	*608241	SMAD NUCLEAR INTERACTING PROTEIN 1; SNIP1			Ubiquitous including brain
			#614501	PSYCHOMOTOR RETARDATION, EPILEPSY, AND CRANIOFACIAL DYSMORPHISM; PMRED	AR	Psychomotor retardation, epilepsy, and craniofacial dysmorphism, (3);	-
3	DNAL11	1p34.3	*602135	DYNEIN, AXONEMAL, LIGHT INTERMEDIATE POLYPEPTIDE 1; DNAL11			Ubiquitous including brain
4	GNL2	1p34.3	*609365	GUANINE NUCLEOTIDE-BINDING PROTEIN-LIKE 2; GNL2			Ubiquitous including brain
5	RSPO1	1p34.3	*609595	R-SPONDIN FAMILY, MEMBER 1; RSPO1			Not expressed in brain. Expressed in ~15 other tissues. Highly expressed in endometrium
			#610644	PALMOPANTAR HYPERKERATOSIS WITH SQUAMOUS CELL CARCINOMA OF SKIN AND46,XX SEX REVERSALP ALMOPLANTAR HYPERKERATOSIS AND TRUE HERMAPHRODITISM, INCLUDED	AR	Palmoplantar hyperkeratosis with squamous cell carcinoma of skin and sex reversal, (3); Palmoplantar hyperkeratosis and true hermaphroditism, (3);	

6	C1orf109	1p34.3	*614799	CHROMOSOME 1 OPEN READING FRAME 109; C1ORF109			Ubiquitous including brain
7	CDCA8	1p34.3	*609977	CELL DIVISION CYCLE-ASSOCIATED PROTEIN 8; CDCA8			Low brain expression. Primarily expressed in bone marrow, testes, and lymph nodes.
8	EPHA10	1p34.3	*611123	EPHRIN RECEPTOR EphA10; EPHA10			Low brain expression. Primarily expressed in testis, colon, small intestine, and stomach.
9	MANEAL	1p34.3					High brain expression. Ubiquitous elsewhere, but lower compared to brain
10	YRDC	1p34.3	*612276	YRDC DOMAIN-CONTAINING PROTEIN; YRDC			Ubiquitous including brain
11	C1orf122	1p34.3					Ubiquitous including brain
12	MTF1	1p34.3	*600172	METAL-REGULATORY TRANSCRIPTION FACTOR 1; MTF1			Ubiquitous including brain
13	INPP5B	1p34.3	*147264	INOSITOL POLYPHOSPHATE-5-PHOSPHATASE, 75-KD; INPP5B			Ubiquitous including brain
14	SF3A3	1p34.3	*605596	SPLICING FACTOR 3A, SUBUNIT 3; SF3A3			Ubiquitous including brain
15	FHL3	1p34.3	*602790	FOUR-AND-A-HALF LIM DOMAINS 3; FHL3			Ubiquitous including brain
16	UTP11	1p34.3	*609440	UTP11-LIKE PROTEIN; UTP11L			Ubiquitous including brain
17	POU3F1	1p34.3	*602479	POU DOMAIN,			-

				CLASS 3, TRANSCRIP TION FACTOR 1; POU3F1			
18	MIR3659	1p34.3					-
19	LINC0134 3	1p34.3					No brain expression. Primary expressed in testis and skin.
20	LINC0168 5	1p34.3	-	-	-	-	-
21	RRAGC	1p34.3	*608267	RAS- RELATED GTP- BINDING PROTEIN C; RRAGC			Ubiquitous including brain
22	MYCBP	1p34.3	*606535	MYC- BINDING PROTEIN; MYCBP			Ubiquitous with low brain expression
23	GJA9- MYCBP	1p34.3					Ubiquitous including brain
24	LOC1053 78663	1p34.3					Low brain expression. Primary expressed in testis, colon, skin, and stomach.
25	GJA9	1p34.3	*611923	GAP JUNCTION PROTEIN, ALPHA-9; GJA9			Low brain expression. Primary expressed in testis, skin, stomach and colon.
26	RHBDL2	1p34.3	*608962	RHOMBOID- LIKE 2; RHBDL2			Low brain expression. Primary expressed in colon, skin, stomach, testis, esophagus, stomach and urinary bladder.
27	AKIRIN1	1p34.3	*615164	AKIRIN 1; AKIRIN1			Ubiquitous including brain
28	NDUFS5	1p34.3	*603847	NADH- UBIQUINON E OXIDORED UCTASE Fe-			Highly expressed in heart. Ubiquitous including brain

				S PROTEIN 5; NDUFS5			
29	MACF1	1p34.3	*608271	MICROTUBULE-ACTIN CROSS-LINKING FACTOR 1; MACF1			Ubiquitous including brain
30	KIAA0754	1p34.3					-
31	BMP8A	1p34.3					Primarily expressed in thyroid and endometrium. Very low expression elsewhere
32	OXCT2P1	1p34.3					-
33	PPIEL	1p34.3					Primarily expressed in thyroid. Ubiquitous expression elsewhere including brain
34	PABPC4	1p34.3	*603407	POLYADENYLATE-BINDING PROTEIN, CYTOPLASMIC, 4; PABPC4			Ubiquitous including brain
35	LOC101929516	1p34.3					Ubiquitous including brain
36	SNORA55	1p34.3					-
37	HEYL	1p34.2	*609034	HAIRY/ENHANCER OF SPLIT-RELATED WITH YRPW MOTIF-LIKE PROTEIN; HEYL			Ubiquitous including brain
38	NT5C1A	1p34.2	*610525	5-PRIME-@NUCLEOTIDASE, CYTOSOLIC, IA; NT5C1A			Primarily expressed in heart, brain, adrenal, esophagus, pancreas, prostate
39	HPCAL4	1p34.2					Primarily expressed in brain with some expression in adrenal
40	PPIE	1p34.2	*602435	PEPTIDYL-PROLYL			Ubiquitous including brain

				ISOMERASE E; PPIE			
41	BMP8B	1p34.2	*602284	BONE MORPHOGE NETIC PROTEIN 8B; BMP8B			Primarily expressed in thyroid with ubiquitous low expression including brain
42	OXCT2	1p34.2	*610289	3- @OXOACID CoA TRANSFER ASE 2; OXCT2			-
43	LOC1019 29536	1p34.2					-

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