

ESM_3 Table of all short insertion deletion variants identified in the *GABRA4* region

Variant	dbSNP138 ID	Functional Category	ASD Cases MAF	Controls MAF	GERP Score
chr4.hg19:46919956	.	intergenic	0.00	0.01	1.91
chr4.hg19:46920452	.	intergenic	0.01	0.00	0.284
chr4.hg19:46922091	.	UTR3	0.01	0.00	3.79
chr4.hg19:46923150	.	UTR3	0.04	0.04	-2.63
chr4.hg19:46923810	.	UTR3	0.01	0.01	-2.99
chr4.hg19:46925191	.	UTR3	0.01	0.00	0.302
chr4.hg19:46925360	rs34833857	UTR3	0.37	0.33	-3.33
chr4.hg19:46928057	.	UTR3	0.00	0.01	2.93
chr4.hg19:46928091	rs3046811	UTR3	0.17	0.09	-4.77
chr4.hg19:46932652	rs34470126	intronic	0.29	0.23	NA
chr4.hg19:46932853	rs111360718	intronic	0.01	0.00	2.97
chr4.hg19:46940071	.	intronic	0.04	0.04	3.33
chr4.hg19:46944642	.	intronic	0.17	0.09	0.225
chr4.hg19:46944643	.	intronic	0.01	0.01	NA
chr4.hg19:46953812	rs9291299	intronic	0.57	0.52	NA
chr4.hg19:46956418	rs33944090	intronic	0.37	0.31	0.225
chr4.hg19:46956573	rs60422399	intronic	0.02	0.01	-0.782
chr4.hg19:46959298	rs33980071	intronic	0.95	0.99	-0.415
chr4.hg19:46961775	rs67861758	intronic	0.05	0.02	0.076
chr4.hg19:46961793	.	intronic	0.00	0.01	-2.15
chr4.hg19:46961835	rs34315359	intronic	0.04	0.02	-1.31
chr4.hg19:46961851	rs34220386	intronic	0.12	0.05	-1.18
chr4.hg19:46963569	.	intronic	0.01	0.00	0.53
chr4.hg19:46964292	rs3047535	intronic	0.27	0.27	0.225
chr4.hg19:46965342	.	intronic	0.01	0.00	0.235
chr4.hg19:46966655	rs150393866	intronic	0.02	0.00	1.4
chr4.hg19:46969371	.	intronic	0.04	0.03	1.29
chr4.hg19:46970391	rs112787221	intronic	0.01	0.02	-2.5
chr4.hg19:46972724	rs142227628	intronic	0.30	0.26	3.76
chr4.hg19:46978371	rs33955741	intronic	0.12	0.18	0.13
chr4.hg19:46979335	rs35997181	intronic	0.10	0.05	-1.28
chr4.hg19:46979336	rs35997181	intronic	0.01	0.02	-1.28
chr4.hg19:46979338	rs35997181	intronic	0.01	0.00	-1.54
chr4.hg19:46979340	rs35997181	intronic	0.01	0.03	0.769
chr4.hg19:46979344	rs35997181	intronic	0.01	0.01	0.769
chr4.hg19:46979362	rs150518504	intronic	0.01	0.00	-0.256
chr4.hg19:46979411	.	intronic	0.01	0.01	1.37
chr4.hg19:46980704	rs71193889	intronic	0.25	0.10	-0.049
chr4.hg19:46982061	rs146269866	intronic	0.03	0.04	1.98
chr4.hg19:46982390	rs59824351	intronic	0.47	0.46	-7.82
chr4.hg19:46990211	.	intronic	0.01	0.02	-6.6
chr4.hg19:46993206	rs66474766	intronic	0.43	0.40	NA
chr4.hg19:46993741	rs71759310	intronic	0.13	0.10	0.033
chr4.hg19:46993742	rs71759310	intronic	0.09	0.08	1.46
chr4.hg19:46993874	.	intronic	0.02	0.00	-3.38
chr4.hg19:46994972	rs3215202	intronic	0.34	0.33	-0.605
chr4.hg19:46998087	rs35038999	intergenic	0.12	0.11	-2.28
chr4.hg19:46999758	rs111362341	intergenic	0.04	0.05	-1.5
chr4.hg19:46999759	rs111362341	intergenic	0.00	0.01	-1.74
chr4.hg19:47000749	.	intergenic	0.01	0.02	-1.05
chr4.hg19:47000884	rs80009800	intergenic	0.04	0.05	-1.36
chr4.hg19:47005096	rs34059067	intergenic	0.46	0.45	-1.64