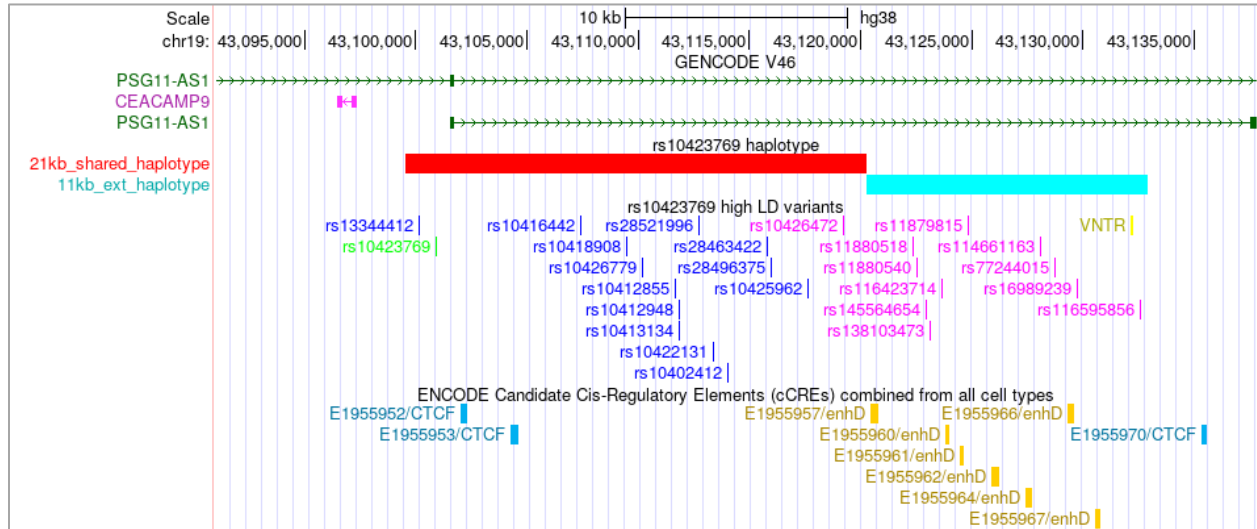


Supplementary Tables and Figures



Supplementary Figure 1. UCSC browser view (hg38) of 21 kb minimum shared haplotype (in red) and the 11 kb extended haplotype (in light blue) and the ENCODE Registry of candidate cis-Regulatory Elements (release September 14, 2018). The protective allele rs10423769 is shown in green. SNPs with $r^2 > 0.95$ with rs10423769_A are shown in blue and SNPs with $r^2 > 0.75$ with rs10423769_A are shown in purple. Tandem repeat region (VNTR, chr19:43132126-43132260) is shown in yellow.

Supplementary Table 1. Tissue and rs10423769 genotype for 38 samples submitted to LRWGS

Sample number	Type	Research Center	rs10423769
sample1	brain	UM/BEB	A/G
sample2	brain	UM/BEB	A/G
sample3	brain	UM/BEB	A/G
sample4	brain	UM/BEB	A/G
sample5	brain	Emory	A/G
sample6	blood	UM	A/A
sample7	blood	UM	A/A
sample8	blood	UM	A/A
sample9	blood	UM	A/A
sample10	blood	UM	A/G
sample11	blood	UM	A/G
sample12	blood	UM	A/G
sample13	blood	UM	A/G
sample14	blood	UM	A/G
sample15	blood	UM	A/G
sample16	blood	UM	A/G
sample17	blood	UM	A/G
sample18	blood	UM	G/G
sample19	blood	UM	G/G
sample20	blood	UM	G/G
sample21	blood	UM	G/G
sample22	blood	UM	G/G
sample23	blood	UM	G/G
sample24	blood	UM	G/G
sample25	blood	UM	G/G
sample26	blood	UM	G/G
sample27	blood	UM	G/G
sample28	blood	UM	G/G
sample29	blood	UM	G/G
sample30	blood	UM	G/G
sample31	blood	UM	G/G
sample32	blood	UM	G/G
sample33	blood	UM	G/G
sample34	blood	UM	G/G
sample35	blood	UM	G/G
sample36	blood	UM	G/G
sample37	blood	UM	G/G
sample38	blood	UM	G/G

Abbreviations: UM/BEB, University of Miami's Brain Endowment Bank; Emory, Emory University Goizueta Alzheimer's Disease Research Center Brain Bank; UM, University of Miami

Supplementary Table 2. Linkage disequilibrium analysis showing variants with $r^2 > 0.75$ with rs10423769 in ADSP 36k Release and the frequency in 38 samples using LRWGS.

CHR	Position	rs_id	r^2 in ADSP 36k	Frequency in LRWGS (n=38)
19	43100141	rs13344412	0.985596	0.282
19	43100929	rs10423769	1	0.269
19	43107376	rs10416442	0.994283	0.256
19	43109437	rs10418908	0.996912	0.269
19	43110194	rs10426779	0.996914	0.269
19	43111648	rs10412855	0.997354	0.269
19	43111823	rs10412948	0.987293	0.269
19	43111824	rs10413134	0.989898	0.269
19	43112698	rs28521996	0.994283	0.269
19	43113370	rs10422131	0.993395	0.269
19	43113989	rs10402412	0.997354	0.269
19	43115785	rs28463422	0.954943	0.269
19	43115960	rs28496375	0.989493	0.269
19	43117612	rs10425962	0.994283	0.269
19	43119195	rs10426472	0.797423	0.269
19	43122350	rs11880518	0.795646	0.231
19	43122490	rs11880540	0.797494	0.231
19	43122910	rs145564654	0.787618	0.231
19	43123128	rs138103473	0.793468	0.231
19	43123613	rs116423714	0.796079	0.231
19	43124823	rs11879815	0.783752	0.231
19	43128072	rs114661163	0.784624	0.218
19	43128687	rs77244015	0.786836	0.231
19	43129746	rs16989239	0.784624	0.231
19	43132544	rs116595856	0.785961	0.231