

### Cognitive and Behavioral Phenotypes: SNPs of Interest

Gene	Chr	Trait Associated with the Gene	References	SNP	Directly Genotyped?	Call Rate	Imputed using 1000 Genomes?	Imputation Quality	Minor Allele in Full Sample	MAF in Full Sample	MAF in Whites	MAF in African Americans	
Apolipoprotein E (APOE)	19	Alzheimer's Disease, Cognitive Function	1,2,5,6,7,11,20,23,24,30,34,35	rs7412	No		Yes	0.991	T	0.082	0.083	0.113	
				rs429358	No		Yes	0.992	C	0.145	0.142	0.208	
Brain-derived neurotrophic factor (BDNF)	11	Depression, Memory	1,14,21,28	rs6265 (Val66Met)	Yes	0.999	Yes	1	A	0.173	0.194	0.030	
Catechol-O-methyltransferase (COMT)	22	Schizophrenia, Cognitive Function	15	rs4680 (Val158Met)	Yes	0.998	Yes	1	A	0.480	0.478 (G)	0.302	
Corticotropin releasing hormone receptor 1 (CRHR1)	17	Stress-related Disorders, Personality Trait Neuroticism		rs110402	Yes	0.998	Yes	1	A	0.434	0.441	0.294	
				rs242924	No		Yes	0.986	T	0.437	0.444	0.291	
				rs7209436	No		Yes	0.980	T	0.423	0.427	0.297	
FK506 binding protein 5 (FKBP5)	6	Stress-related Disorders (chaperone of hsp90, which binds to GR)		rs3800373	Yes	0.996	Yes	1	C	0.309	0.283	0.444	
				rs1360780	No		Yes	0.999	T	0.322	0.305	0.427	
				rs9470080	No		Yes		T	0.352	0.332	0.483	
				rs9296158	Yes	0.995	Yes	1	A	0.332	0.302	0.487	
Fat mass and obesity associated (FTO)	16	Obesity		rs9939609	No		Yes	1	A	0.401	0.394	0.499 (T)	
Neuropeptide Y (NPY)	7	Stress-related Disorders		rs16147	Yes	0.999	Yes	1	A	0.493	0.485	0.374	
				rs3037354 (-/TG type)	No		No						
				rs17149106	No		Yes	0.995	T	0.039	0.037	0.058	
				rs16139	Yes	0.995	Yes	1	G	0.031	0.037	0.005	
				rs5573 (kgp967484 1)	Yes	0.999	Yes	1	G	0.494	0.485	0.371 (A)	
rs5574	Yes	0.998	Yes	1	A	0.459	0.483	0.350					
Oxytocin receptor (OXTR)	3	Autism, Prosocial Behavior/Social Affiliation		rs53576 (kgp10617)	Yes	0.995	Yes	1	A	0.315	0.320	0.228	

### Cognitive and Behavioral Phenotypes: Genes of Interest

Gene	Gene Name	Chr	Start	End	Trait Studied for Association with the Gene	References	Number of Genotyped SNPs with Call Rate >95%	Number of Additional SNPs Imputed from 1000 Genomes with INFO>0.8	Number of 1000G Functional SNPs (Stop, NS, Splice)
adrenergic beta-2 receptor	ADRB2	5	148201156	148213196	Cognition	1	18	52	3
v-akt murine thymoma viral oncogene homolog 1	AKT1	14	105230686	105267088	Cognition	1	34	191	0
aldehyde dehydrogenase 5A1	ALDH5A1 (SSADH)	6	24490080	24542435	Cognition	1	82	325	5
apolipoprotein E	APOE	19	45403956	45417650	Cognition, Alzheimer's Disease	1,2,5,6,7,11,20,23,24,30,34,35	13	49	3
amyloid beta A4 precursor protein	APP	21	27247861	27548446	Cognition	1	235	1469	1
brain-derived neurotrophic factor	BDNF	11	27671440	27748605	Cognition, Depression	1,14,21,28	46	212	3
cystathionine-beta-synthase	CBS	21	44468301	44502053	Cognition	1	50	166	1
cholecystokinin A receptor	CCKAR	4	26478022	26497084	Cognition		25	111	2
cholesteryl ester transfer protein, plasma	CETP	16	56990762	57022757	Cognition	1	72	187	5
cholinergic receptor, muscarinic 2	CHRM2	7	136548416	136710002	Cognition		127	704	1
cholinergic receptor, nicotinic, alpha 3 (neuronal)	CHRNA3	15	78880394	78918637	Smoking, Alcohol Dependence		40	109	7

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cholinergic receptor, nicotinic, alpha 4 (neuronal)	CHRNA4	20	61970420	62014753	Cognition	1	77	274	2
cholinergic receptor, nicotinic, alpha 5 (neuronal)	CHRNA5	15	78857862	78887611	Smoking, Alcohol Dependence		35	208	4
cholinergic receptor, nicotinic, alpha 6 (neuronal)	CHRNA6	8	42602763	42656535	Smoking		22	257	1
cholinergic receptor, nicotinic, alpha 7 (neuronal)	CHRNA7	15	32317691	32469722	Cognition		103	508	0
cholinergic receptor, nicotinic, beta 3 (neuronal)	CHRN3	8	42547519	42597550	Smoking		27	380	1
cholinergic receptor, nicotinic, beta 4 (neuronal)	CHRN4	15	78911461	79017628	Smoking, Alcohol Dependence		88	558	7
cholinergic receptor, nicotinic, delta	CHRNA6	2	233,390,869	233,401,374	Smoking, Alcohol Dependence		17	90	2
catechol-O-methyltransferase	COMT	22	19924130	19962498	Cognition, Schizophrenia	15	68	262	6
corticotropin releasing hormone receptor 1	CRHR1	17	43694267	43918194	Stress-related Disorders, Personality		130	1362	4
cathepsin D	CTSD	11	1768982	1790222	Cognition	1	20	118	3
cytochrome P450, family 2, subfamily A, polypeptide 6	CYP2A6	19	41344444	41361352	Smoking		4	68	3
cytochrome P450, family 3, subfamily A, polypeptide 4	CYP3A4	7	99349604	99386888	P450 Gene: Drug and Xenobiotic Metabolism		35	115	3

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cytochrome P450, family 3, subfamily A, polypeptide 5	CYP3A5	7	99240817	99282621	P450 Gene: Drug and Xenobiotic Metabolism		41	126	4
D-amino acid oxidase activator	DAOA	13	106113216	106148383	Cognition	1	40	265	3
dopamine beta-hydroxylase (dopamine beta-monoxygenase)	DBH	9	136496482	136529466	Cognition		55	194	6
disrupted in schizophrenia 1	DISC1	1	231757561	232182018	Cognition	1,31	462	2001	9
dopamine receptor D3	DRD3	3	113842499	113923254	Cognition	1	71	366	1
dystrobrevin binding protein 1	DTNBP1	6	15518032	15668289	Cognition	1	80	629	6
v-erb-a erythroblastic leukemia viral oncogene homolog 4	ERBB4	2	212235446	213408565	Cognition	1	1065	7297	0
FK506 binding protein 5	FKBP5	6	35536362	35701360	Stress-related Disorders	1	64	740	2
fragile X mental retardation 1	FMR1	X	146988469	147037645	Cognition		0	112	1
fat mass and obesity associated	FTO	16	53732875	54160853	Obesity		455	1970	4
galanin	GAL (GALN)	11	68446247	68463643	GABA Receptor		19	65	3
major histocompatibility complex, class II, DR beta 1	HLA-DRB1	6	32541546	32562625	Cognition	1	6	608	2
5-hydroxytryptamine (serotonin) receptor 2A,	HTR2A	13	47402513	47476169	Cognition	1	109	353	5

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G protein-coupled									
interleukin 1, beta	IL1B	2	113582328	113599480	Cognition	1	16	44	0
klotho	KL	13	33585207	33645282	Cognition	1,9	67	358	6
kallikrein related-peptidase 8	KLK8	19	51494264	51509958	Cognition	1	23	90	1
myeloperoxidase	MPO	17	56342217	56363296	Cognition	27	16	53	3
homeobox, msh-like 1	MSX1	4	4856393	4870663	Cognition	1	36	79	1
methylenetetrahydrofolate reductase (NAD(P)H)	MTHFR	1	11840780	11871977	Cognition	1,12	50	184	12
nicastrin	NCSTN	1	160308062	160333742	Cognition	1	31	110	2
neuropeptide Y	NPY	7	24318782	24336484	Stress-related Disorders		26	115	1
opioid receptor, mu 1	OPRM1	6	154326631	154573001	Opitoid Receptor: Drug Dependence, Cognitive Functions		224	1314	13
oxytocin receptor	OXTR	3	8787094	8816314	Autism, Prosocial Behavior		71	141	6
peroxisome proliferator-activated receptor gamma	PPARG	3	12323867	12480855	Cognition	1,18	214	519	1
protein phosphatase 1, regulatory (inhibitor) subunit 1B	PPP1R1B	17	37777993	37797879	Cognition		15	72	1
prion protein	PRNP	20	4661882	4687236	Cognition	1,19	28	97	3
solute carrier family 6 (neurotransmitter transporter,	SLC6A2	16	55684516	55745104	Norepinepherine Transporter: ADHD		102	292	1

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noradrenalin), member 2									
solute carrier family 6 (neurotransmitter transporter, serotonin), member 4	SLC6A4	17	28516337	28568020	Cognition	26	27	210	2
synaptosomal-associated protein, 25kDa	SNAP25	20	10194478	10293066	Cognition	1	101	382	0
sortilin-related receptor, L(DLR class) A repeats containing	SORL1	11	121317912	121509387	Cognition	1	155	708	7
tumor necrosis factor	TNF	6	31538344	31551113	Cognition	1	38	35	4
Werner syndrome, RecQ helicase-like	WRN	8	30886317	31036285	Cognition	1	115	646	8
WW and C2 domain containing 1	WWC1 (KIBRA)	5	167713656	167904308	Cognition	1	232	1044	4

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