

Gene Symbol	Description	SZ Association Type	Reference
<i>ABCB10</i>	ATP-binding cassette, sub-family B (MDR/TAP), member 10	DER (teen > adult)	[36]
<i>ABCB10</i>	ATP-binding cassette, sub-family B (MDR/TAP), member 10	DER (teen > child)	[36]
<i>ABHD10</i>	abhydrolase domain containing 10	DER (teen > adult)	[36]
<i>ACAD8</i>	acyl-Coenzyme A dehydrogenase family, member 8	CNV	[18]
<i>ACADSB</i>	acyl-Coenzyme A dehydrogenase, short/branched chain	Peak Expression (15-25y)	[35]
<i>ACAT1</i>	acetyl-Coenzyme A acetyltransferase 1 (acetoacetyl Coenzyme A thiolase)	RNA (DG)	[34]
<i>ACAT2</i>	acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase)	Protein (ACC)	[37]
<i>ACN9</i>	ACN9 homolog (<i>S. cerevisiae</i>)	<i>de novo</i> mutation	[14]
<i>ACO1</i>	aconitase 1, soluble	<i>de novo</i> mutation	[14]
<i>ACO2</i>	aconitase 2, mitochondrial	Rare mutation	[15]
<i>ACO2</i>	aconitase 2, mitochondrial	Protein (DLPFC)	[37]
<i>ACP6</i>	acid phosphatase 6, lysophosphatidic	CNV	[18]
<i>ACSL1</i>	acyl-CoA synthetase long-chain family member 1	Peak Expression (15-25y)	[35]
<i>ACSL4</i>	acyl-CoA synthetase long-chain family member 4	<i>de novo</i> mutation	[14]
<i>ACSL5</i>	acyl-CoA synthetase long-chain family member 5	<i>de novo</i> mutation	[14]
<i>ACYP2</i>	acylphosphatase 2, muscle type	Peak Expression (15-25y)	[35]
<i>AGXT2</i>	alanine-glyoxylate aminotransferase 2-like 2	CNV	[18]
<i>AIFM2</i>	apoptosis-inducing factor, mitochondrion-associated, 2	DER (teen > adult)	[36]
<i>AIFM2</i>	apoptosis-inducing factor, mitochondrion-associated, 2	DER (teen > child)	[36]
<i>AIFM3</i>	apoptosis-inducing factor, mitochondrion-associated, 3	CNV	[18]
<i>ALAS1</i>	aminolevulinate, delta-, synthase 1	<i>de novo</i> mutation	[14]
<i>ALDH1B1</i>	aldehyde dehydrogenase 1 family, member B1	Peak Expression (15-25y)	[35]
<i>ALDH1L1</i>	aldehyde dehydrogenase 1 family, member L1	<i>de novo</i> mutation	[14]
<i>ALDH1L2</i>	aldehyde dehydrogenase 1 family, member L2	<i>de novo</i> mutation	[14]
<i>ALDH5A1</i>	aldehyde dehydrogenase 5 family, member A1 (succinate-semialdehyde dehydrogenase)	<i>de novo</i> mutation	[14]
<i>ALDH7A1</i>	aldehyde dehydrogenase 7 family, member A1	Protein (ACC)	[37]
<i>AMACR</i>	alpha-methylacyl-CoA racemase	CNV	[18]
<i>ARMC1</i>	armadillo repeat containing 1	Peak Expression (15-25y)	[35]
<i>AS3MT</i>	arsenic (+3 oxidation state) methyltransferase	GWAS (PGC)	[12]
<i>ATAD3A</i>	ATPase family, AAA domain containing 3A	Peak Expression (15-25y)	[35]
<i>ATAD3B</i>	ATPase family, AAA domain containing 3B	DER (teen > adult)	[36]
<i>ATP5A1</i>	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	Rare mutation	[15]
<i>ATP5A1</i>	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	RNA (PFC area 9)	[13]
<i>ATP5A1</i>	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	Protein (DLPFC/ACC)	[37]
<i>ATP5B</i>	ATP synthase, H+ transporting, mitochondrial F1 complex, beta polypeptide	RNA (DLPFC pyramidal)	[5]
<i>ATP5B</i>	ATP synthase, H+ transporting, mitochondrial F1 complex, beta polypeptide	Protein (DLPFC/CC)	[37]
<i>ATP5C1</i>	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma polypeptide 1	RNA (DLPFC pyramidal)	[5]

Gene Symbol	Description	SZ Association Type	Reference
ATP5F1	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit B1	RNA (DLPFC pyramidal)	[5]
ATP5H	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit d	Protein (DLPFC)	[37]
ATP5J	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F2	CNV	[18]
ATP5J	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F2	Peak Expression (15-25y)	[35]
ATP5L	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit G	RNA (DLPFC pyramidal)	[5]
ATP5O	ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit (oligomycin sensitivity)	DER (teen > adult)	[36]
ATP5S	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit s (factor B)	Peak Expression (15-25y)	[35]
ATPAF1	ATP synthase mitochondrial F1 complex assembly factor 1	Peak Expression (15-25y)	[35]
ATPAF2	ATP synthase mitochondrial F1 complex assembly factor 2	GWAS (PGC)	[12]
BCAT1	branched chain aminotransferase 1, cytosolic	de novo mutation	[14]
BDH1	3-hydroxybutyrate dehydrogenase, type 1	de novo CNV	[19]
BDH1	3-hydroxybutyrate dehydrogenase, type 1	CNV	[18]
BDH1	3-hydroxybutyrate dehydrogenase, type 1	DER (teen > adult)	[36]
C12orf62	chromosome 12 open reading frame 62	Peak Expression (15-25y)	[35]
C1orf151	chromosome 1 open reading frame 151	Peak Expression (15-25y)	[35]
C1QBP	complement component 1, q subcomponent binding protein	DER (teen > adult)	[36]
C20orf142	chromosome 20 open reading frame 142	Peak Expression (15-25y)	[35]
C20orf44	chromosome 20 open reading frame 44	Peak Expression (15-25y)	[35]
C2orf47	chromosome 2 open reading frame 47	GWAS (PGC)	[12]
C3orf1	chromosome 3 open reading frame 1	Peak Expression (15-25y)	[35]
C3orf28	chromosome 3 open reading frame 28	Peak Expression (15-25y)	[35]
C3orf60	chromosome 3 open reading frame 60	Peak Expression (15-25y)	[35]
CABC1	chaperone, ABC1 activity of bc1 complex homolog (S. pombe)	Peak Expression (15-25y)	[35]
CBR4	carbonyl reductase 4	de novo mutation	[14]
CCDC109A	coiled-coil domain containing 109A	Peak Expression (15-25y)	[35]
CERK	ceramide kinase	de novo mutation	[14]
CERK	ceramide kinase	DER (teen > adult)	[36]
CHAT	choline acetyltransferase	Protein (ACC)	[37]
CHCHD7	coiled-coil-helix-coiled-coil-helix domain containing 7	Peak Expression (15-25y)	[35]
CKMT1A	creatine kinase, mitochondrial 1A	Protein (DLPFC/ACC)	[37]
CKMT1B	creatine kinase, mitochondrial 1B	Protein (ACC)	[37]
CLPX	ClpX caseinolytic peptidase X homolog (E. coli)	de novo mutation	[14]
CLPX	ClpX caseinolytic peptidase X homolog (E. coli)	Peak Expression (15-25y)	[35]
CLPX	ClpX caseinolytic peptidase X homolog (E. coli)	DER (teen > child)	[36]
COMT	catechol-O-methyltransferase	CNV (22q11.2)	[32]
COMT	catechol-O-methyltransferase	CNV	[18]
COMTD1	catechol-O-methyltransferase domain containing 1	Peak Expression (15-25y)	[35]

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COMTD1	catechol-O-methyltransferase domain containing 1	DER (teen > adult)	[36]
COQ10B	coenzyme Q10 homolog B (<i>S. cerevisiae</i>)	GWAS (PGC)	[12]
COQ3	coenzyme Q3 homolog, methyltransferase (<i>S. cerevisiae</i>)	Peak Expression (15-25y)	[35]
COQ5	coenzyme Q5 homolog, methyltransferase (<i>S. cerevisiae</i>)	Peak Expression (15-25y)	[35]
COX10	COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast)	CNV	[18]
COX11	COX11 homolog, cytochrome c oxidase assembly protein (yeast)	Peak Expression (15-25y)	[35]
COX15	COX15 homolog, cytochrome c oxidase assembly protein (yeast)	Peak Expression (15-25y)	[35]
COX4I1	cytochrome c oxidase subunit IV isoform 1	<i>de novo</i> mutation	[14]
COX5B	cytochrome c oxidase subunit Vb	Peak Expression (15-25y)	[35]
COX6A2	cytochrome c oxidase subunit VIa polypeptide 2	Peak Expression (15-25y)	[35]
COX6B2	cytochrome c oxidase subunit VIb polypeptide 2 (testis)	Peak Expression (15-25y)	[35]
COX7A1	cytochrome c oxidase subunit VIIa polypeptide 1 (muscle)	RNA (DLPFC pyramidal)	[5]
COX7B	cytochrome c oxidase subunit VIIb	RNA (DLPFC pyramidal)	[5]
COX7C	cytochrome c oxidase subunit VIIc	RNA (DLPFC pyramidal)	[5]
COX8A	cytochrome c oxidase subunit 8A (ubiquitous)	RNA (DLPFC pyramidal)	[5]
CPOX	coproporphyrinogen oxidase	Peak Expression (15-25y)	[35]
CS	citrate synthase	Protein (ACC)	[37]
CYB5B	cytochrome b5 type B (outer mitochondrial membrane)	CNV	[18]
CYB5B	cytochrome b5 type B (outer mitochondrial membrane)	Peak Expression (15-25y)	[35]
CYB5R1	cytochrome b5 reductase 1	Peak Expression (15-25y)	[35]
DAP3	death associated protein 3	DER (teen > adult)	[36]
DARS2	aspartyl-tRNA synthetase 2 (mitochondrial)	DER (teen > adult)	[36]
DARS2	aspartyl-tRNA synthetase 2 (mitochondrial)	DER (teen > child)	[36]
DDAH1	dimethylarginine dimethylaminohydrolase 1	Protein (DLPFC/ACC/CC)	[37]
DDX28	DEAD (Asp-Glu-Ala-Asp) box polypeptide 28	GWAS (PGC)	[12]
DLD	dihydrolipoamide dehydrogenase	RNA (DLPFC pyramidal)	[5]
DLD	dihydrolipoamide dehydrogenase	Peak Expression (15-25y)	[35]
DNAJA3	DnaJ (Hsp40) homolog, subfamily A, member 3	Peak Expression (15-25y)	[35]
DRG2	developmentally regulated GTP binding protein 2	GWAS (PGC)	[12]
DUS2L	dihydrouridine synthase 2-like, SMM1 homolog (<i>S. cerevisiae</i>)	GWAS (PGC)	[12]
DUSP26	dual specificity phosphatase 26 (putative)	Peak Expression (15-25y)	[35]
DUT	dUTP pyrophosphatase	Peak Expression (15-25y)	[35]
EARS2	glutamyl-tRNA synthetase 2 (mitochondrial)(putative)	<i>de novo</i> mutation	[14]
ECHDC3	enoyl Coenzyme A hydratase domain containing 3	Peak Expression (15-25y)	[35]
ECSIT	ECSIT homolog (<i>Drosophila</i>)	Peak Expression (15-25y)	[35]
EFHD1	EF-hand domain family, member D1	GWAS (PGC)	[12]
ELN	elastin (supravalvular aortic stenosis, Williams-Beuren syndrome)	Peak Expression (15-25y)	[35]

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ETFFA	electron-transfer-flavoprotein, alpha polypeptide (glutaric aciduria II)	RNA (DLPFC pyramidal)	[5]
FAHD2A	fumarylacetoacetate hydrolase domain containing 2A	Peak Expression (15-25y)	[35]
FH	fumarate hydratase	Peak Expression (15-25y)	[35]
FIS1	fission 1 (mitochondrial outer membrane) homolog (S. cerevisiae)	Peak Expression (15-25y)	[35]
FOXRED1	FAD-dependent oxidoreductase domain containing 1	<i>de novo</i> mutation	[14]
FTH1	ferritin, heavy polypeptide 1	Protein (CC)	[37]
FXC1	fracture callus 1 homolog (rat)	Peak Expression (15-25y)	[35]
GFM1	G elongation factor, mitochondrial 1	Peak Expression (15-25y)	[35]
GLDC	glycine dehydrogenase (decarboxylating)	Peak Expression (15-25y)	[35]
GLRX2	glutaredoxin 2	Peak Expression (15-25y)	[35]
GLS	glutaminase	Peak Expression (15-25y)	[35]
GLUD1	glutamate dehydrogenase 1	Rare mutation	[15]
GOT2	glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2)	CNV	[18]
GOT2	glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2)	RNA (PFC area 9)	[13]
GOT2	glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2)	Peak Expression (15-25y)	[35]
GPD1	glycerol-3-phosphate dehydrogenase 1 (soluble)	Protein (ACC)	[37]
GPD2	glycerol-3-phosphate dehydrogenase 2 (mitochondrial)	Peak Expression (15-25y)	[35]
GPX1	glutathione peroxidase 1	Protein (DLPFC)	[37]
GRSF1	G-rich RNA sequence binding factor 1	Peak Expression (15-25y)	[35]
GSTK1	glutathione S-transferase kappa 1	Peak Expression (15-25y)	[35]
GTPBP3	GTP binding protein 3 (mitochondrial)	<i>de novo</i> mutation	[14]
GTPBP5	GTP binding protein 5 (putative)	<i>de novo</i> mutation	[14]
HADH	hydroxyacyl-Coenzyme A dehydrogenase	DER (teen > adult)	[36]
HADH	hydroxyacyl-Coenzyme A dehydrogenase	DER (teen > child)	[36]
HAGH	hydroxyacylglutathione hydrolase	Protein (ACC)	[37]
HBXIP	hepatitis B virus x interacting protein	Peak Expression (15-25y)	[35]
HIBADH	3-hydroxyisobutyrate dehydrogenase	Protein (DLPFC)	[37]
HIBADH	3-hydroxyisobutyrate dehydrogenase	Peak Expression (15-25y)	[35]
HIGD1A	HIG1 domain family, member 1A	Peak Expression (15-25y)	[35]
HK1	hexokinase 1	Protein (DLPFC)	[37]
HSD17B4	hydroxysteroid (17-beta) dehydrogenase 4	CNV	[18]
HSDL1	hydroxysteroid dehydrogenase like 1	CNV	[18]
HSDL1	hydroxysteroid dehydrogenase like 1	DER (teen > adult)	[36]
HSPA9	heat shock 70kDa protein 9 (mortalin)	GWAS (PGC)	[12]
HSPD1	heat shock 60kDa protein 1 (chaperonin)	GWAS (PGC)	[12]
HSPD1	heat shock 60kDa protein 1 (chaperonin)	Protein (DLPFC)	[37]
HSPE1	heat shock 10kDa protein 1 (chaperonin 10)	GWAS (PGC)	[12]

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IDH1	isocitrate dehydrogenase 1 (NADP+), soluble	Peak Expression (15-25y)	[35]
IDH3A	isocitrate dehydrogenase 3 (NAD+) alpha	RNA (DLPFC pyramidal)	[5]
IDH3A	isocitrate dehydrogenase 3 (NAD+) alpha	RNA (DG)	[34]
IDH3A	isocitrate dehydrogenase 3 (NAD+) alpha	Protein (ACC)	[37]
IDH3B	isocitrate dehydrogenase 3 (NAD+) beta	RNA (DLPFC pyramidal)	[5]
IDH3B	isocitrate dehydrogenase 3 (NAD+) beta	Peak Expression (15-25y)	[35]
IMMP2L	IMP2 inner mitochondrial membrane peptidase-like (<i>S. cerevisiae</i>)	GWAS (PGC)	[12]
IMMT	inner membrane protein, mitochondrial (mitofilin)	Protein (ACC)	[37]
IMMT	inner membrane protein, mitochondrial (mitofilin)	DER (teen > child)	[36]
IREB2	iron-responsive element binding protein 2	GWAS (PGC)	[12]
IVD	isovaleryl Coenzyme A dehydrogenase	Peak Expression (15-25y)	[35]
KYNU	kynureninase (L-kynurenine hydrolase)	Rare mutation	[15]
KYNU	kynureninase (L-kynurenine hydrolase)	Peak Expression (15-25y)	[35]
LACTB2	lactamase, beta 2	Peak Expression (15-25y)	[35]
LAP3	leucine aminopeptidase 3	Protein (DLPFC)	[37]
LDHA	lactate dehydrogenase A	RNA (DG)	[34]
LDHB	lactate dehydrogenase B	Protein (ACC/CC)	[37]
LIAS	lipoic acid synthetase	Peak Expression (15-25y)	[35]
LIPT1	lipoyltransferase 1	Peak Expression (15-25y)	[35]
LOC339229	hypothetical protein LOC339229	Peak Expression (15-25y)	[35]
LONP1	lon peptidase 1, mitochondrial	<i>de novo</i> mutation	[14]
LYRM2	LYR motif containing 2	CNV	[18]
LYRM7	Lyrm7 homolog (mouse)	DER (teen > adult)	[36]
MARS2	methionine-tRNA synthetase 2 (mitochondrial)	GWAS (PGC)	[12]
MCART1	mitochondrial carrier triple repeat 1	Peak Expression (15-25y)	[35]
MCEE	methylmalonyl CoA epimerase	Peak Expression (15-25y)	[35]
MDH1	malate dehydrogenase 1, NAD (soluble)	RNA (PFC area 9)	[13]
MDH1	malate dehydrogenase 1, NAD (soluble)	Protein (DLPFC)	[37]
MDH1	malate dehydrogenase 1, NAD (soluble)	DER (teen > child)	[36]
MDH2	malate dehydrogenase 2, NAD (mitochondrial)	<i>de novo</i> CNV	[19]
MDH2	malate dehydrogenase 2, NAD (mitochondrial)	CNV	[18]
MDH2	malate dehydrogenase 2, NAD (mitochondrial)	RNA (DLPFC pyramidal)	[5]
MDH2	malate dehydrogenase 2, NAD (mitochondrial)	RNA (DG)	[34]
ME1	malic enzyme 1, NADP(+)-dependent, cytosolic	Peak Expression (15-25y)	[35]
ME2	malic enzyme 2, NAD(+)-dependent, mitochondrial	DER (teen > adult)	[36]
MFN2	mitofusin 2	Peak Expression (15-25y)	[35]
MIPEP	mitochondrial intermediate peptidase	CNV	[18]

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<i>MLYCD</i>	malonyl-CoA decarboxylase	CNV	[18]
<i>MPST</i>	mercaptopyruvate sulfurtransferase	DER (teen > adult)	[36]
<i>MPST</i>	mercaptopyruvate sulfurtransferase	DER (teen > child)	[36]
<i>MRM1</i>	mitochondrial rRNA methyltransferase 1 homolog (<i>S. cerevisiae</i>)	Peak Expression (15-25y)	[35]
<i>MRPL22</i>	mitochondrial ribosomal protein L22	Peak Expression (15-25y)	[35]
<i>MRPL27</i>	mitochondrial ribosomal protein L27	<i>de novo</i> mutation	[14]
<i>MRPL30</i>	mitochondrial ribosomal protein L30	Peak Expression (15-25y)	[35]
<i>MRPL33</i>	mitochondrial ribosomal protein L33	Peak Expression (15-25y)	[35]
<i>MRPL37</i>	mitochondrial ribosomal protein L37	DER (teen > adult)	[36]
<i>MRPL39</i>	mitochondrial ribosomal protein L39	CNV	[18]
<i>MRPL40</i>	mitochondrial ribosomal protein L40	CNV (22q11.2)	[32]
<i>MRPL40</i>	mitochondrial ribosomal protein L40	CNV	[18]
<i>MRPL42</i>	mitochondrial ribosomal protein L42	DER (teen > adult)	[36]
<i>MRPL46</i>	mitochondrial ribosomal protein L46	Peak Expression (15-25y)	[35]
<i>MRPL48</i>	mitochondrial ribosomal protein L48	Peak Expression (15-25y)	[35]
<i>MRPL51</i>	mitochondrial ribosomal protein L51	Peak Expression (15-25y)	[35]
<i>MRPS18C</i>	mitochondrial ribosomal protein S18C	Peak Expression (15-25y)	[35]
<i>MRPS30</i>	mitochondrial ribosomal protein S30	DER (teen > adult)	[36]
<i>MRPS30</i>	mitochondrial ribosomal protein S30	DER (teen > child)	[36]
<i>MRPS9</i>	mitochondrial ribosomal protein S9	Peak Expression (15-25y)	[35]
<i>MRPS9</i>	mitochondrial ribosomal protein S9	DER (teen > adult)	[36]
<i>MRS2L</i>	MRS2-like, magnesium homeostasis factor (<i>S. cerevisiae</i>)	Peak Expression (15-25y)	[35]
<i>MSRA</i>	methionine sulfoxide reductase A	CNV	[18]
<i>MTG1</i>	mitochondrial GTPase 1 homolog (<i>S. cerevisiae</i>)	DER (teen > adult)	[36]
<i>MTHFS</i>	5,10-methenyltetrahydrofolate synthetase (5-formyltetrahydrofolate cyclo-ligase)	Peak Expression (15-25y)	[35]
<i>MTIF2</i>	mitochondrial translational initiation factor 2	Peak Expression (15-25y)	[35]
<i>MTIF3</i>	mitochondrial translational initiation factor 3	Peak Expression (15-25y)	[35]
<i>MTO1</i>	mitochondrial translation optimization 1 homolog (<i>S. cerevisiae</i>)	Peak Expression (15-25y)	[35]
<i>MTRF1</i>	mitochondrial translational release factor 1	CNV	[18]
<i>MULK</i>	multiple substrate lipid kinase	Peak Expression (15-25y)	[35]
<i>NAGS</i>	N-acetylglutamate synthase	Protein (ACC)	[37]
<i>NDUFA10</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10, 42kDa	Peak Expression (15-25y)	[35]
<i>NDUFA11</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 11, 14.7kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFA12L</i>	NDUFA12-like	Peak Expression (15-25y)	[35]
<i>NDUFA13</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13	GWAS (PGC)	[12]
<i>NDUFA13</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13	Peak Expression (15-25y)	[35]
<i>NDUFA2</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2, 8kDa	GWAS (PGC)	[12]

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<i>NDUFA2</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2, 8kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFA2</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2, 8kDa	Protein (DLPFC)	[37]
<i>NDUFA5</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5, 13kDa	Protein (ACC)	[37]
<i>NDUFA6</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa	GWAS (PGC)	[12]
<i>NDUFA6</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFA7</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7, 14.5kDa	DER (teen > adult)	[36]
<i>NDUFA7</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7, 14.5kDa	DER (teen > child)	[36]
<i>NDUFA8</i>	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFB10</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22kDa	Peak Expression (15-25y)	[35]
<i>NDUFB2</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2, 8kDa	RNA (DG)	[34]
<i>NDUFB3</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 3, 12kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFB5</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa	RNA (DG)	[34]
<i>NDUFB5</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa	DER (teen > child)	[36]
<i>NDUFB6</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 6, 17kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFB7</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7, 18kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFB9</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9, 22kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFB9</i>	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9, 22kDa	Peak Expression (15-25y)	[35]
<i>NDUFC1</i>	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 1, 6kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFS1</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase)	GWAS (early onset)	[33]
<i>NDUFS1</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase)	Protein (DLPFC)	[37]
<i>NDUFS2</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase)	GWAS (early onset)	[33]
<i>NDUFS2</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase)	RNA (DLPFC pyramidal)	[5]
<i>NDUFS2</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase)	Peak Expression (15-25y)	[35]
<i>NDUFS2</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase)	DER (teen > adult)	[36]
<i>NDUFS3</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 3, 30kDa (NADH-coenzyme Q reductase)	Protein (DLPFC)	[37]
<i>NDUFS4</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 4, 18kDa (NADH-coenzyme Q reductase)	RNA (DLPFC pyramidal)	[5]
<i>NDUFS4</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 4, 18kDa (NADH-coenzyme Q reductase)	RNA (DG)	[34]
<i>NDUFS7</i>	NADH dehydrogenase (ubiquinone) Fe-S protein 7, 20kDa (NADH-coenzyme Q reductase)	Peak Expression (15-25y)	[35]
<i>NDUFV1</i>	NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFV1</i>	NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kDa	Peak Expression (15-25y)	[35]
<i>NDUFV2</i>	NADH dehydrogenase (ubiquinone) flavoprotein 2, 24kDa	RNA (DLPFC pyramidal)	[5]
<i>NDUFV2</i>	NADH dehydrogenase (ubiquinone) flavoprotein 2, 24kDa	Protein (DLPFC)	[37]
<i>NEU4</i>	sialidase 4	Peak Expression (15-25y)	[35]
<i>NFS1</i>	NFS1 nitrogen fixation 1 homolog (<i>S. cerevisiae</i>)	Peak Expression (15-25y)	[35]
<i>NIPSNAP3B</i>	nipsnap homolog 3B (<i>C. elegans</i>)	Peak Expression (15-25y)	[35]
<i>NME6</i>	non-metastatic cells 6, protein expressed in (nucleoside-diphosphate kinase)	DER (teen > adult)	[36]
<i>NT5C3</i>	5'-nucleotidase, cytosolic III	CNV	[18]

Gene Symbol	Description	SZ Association Type	Reference
<i>NUDT2</i>	nudix (nucleoside diphosphate linked moiety X)-type motif 2	Peak Expression (15-25y)	[35]
<i>OAT</i>	ornithine aminotransferase (gyrate atrophy)	RNA (PFC area 9)	[13]
<i>OXCT1</i>	3-oxoacid CoA transferase 1	RNA (PFC area 9)	[13]
<i>OXNAD1</i>	oxidoreductase NAD-binding domain containing 1	Peak Expression (15-25y)	[35]
<i>OXR1</i>	oxidation resistance 1	Peak Expression (15-25y)	[35]
<i>OXR1</i>	oxidation resistance 1	DER (teen > child)	[36]
<i>PAK7</i>	p21(CDKN1A)-activated kinase 7	Peak Expression (15-25y)	[35]
<i>PARK7</i>	Parkinson disease (autosomal recessive, early onset) 7	Protein (ACC/CC)	[37]
<i>PC</i>	pyruvate carboxylase	Peak Expression (15-25y)	[35]
<i>PCCB</i>	propionyl Coenzyme A carboxylase, beta polypeptide	GWAS (PGC)	[12]
<i>PDHA1</i>	pyruvate dehydrogenase (lipoamide) alpha 1	Protein (DLPFC)	[37]
<i>PDHB</i>	pyruvate dehydrogenase (lipoamide) beta	RNA (DLPFC pyramidal)	[5]
<i>PDHB</i>	pyruvate dehydrogenase (lipoamide) beta	RNA (DG)	[34]
<i>PDK2</i>	pyruvate dehydrogenase kinase, isozyme 2	Peak Expression (15-25y)	[35]
<i>PDK3</i>	pyruvate dehydrogenase kinase, isozyme 3	DER (teen > adult)	[36]
<i>PDK3</i>	pyruvate dehydrogenase kinase, isozyme 3	DER (teen > child)	[36]
<i>PEX11B</i>	peroxisomal biogenesis factor 11B	Peak Expression (15-25y)	[35]
<i>PHB</i>	prohibitin	Protein (ACC)	[37]
<i>PITRM1</i>	pitrilysin metallopeptidase 1	DER (teen > adult)	[36]
<i>PITRM1</i>	pitrilysin metallopeptidase 1	DER (teen > child)	[36]
<i>PMPCB</i>	peptidase (mitochondrial processing) beta	Peak Expression (15-25y)	[35]
<i>PNKD</i>	paroxysmal nonkinesiogenic dyskinesia	Peak Expression (15-25y)	[35]
<i>PNKD</i>	paroxysmal nonkinesiogenic dyskinesia	DER (teen > child)	[36]
<i>POLRMT</i>	polymerase (RNA) mitochondrial (DNA directed)	Peak Expression (15-25y)	[35]
<i>PPA2</i>	pyrophosphatase (inorganic) 2	RNA (DLPFC pyramidal)	[5]
<i>PPA2</i>	pyrophosphatase (inorganic) 2	Protein (DLPFC)	[37]
<i>PPIF</i>	peptidylprolyl isomerase F (cyclophilin F)	Peak Expression (15-25y)	[35]
<i>PPM1K</i>	protein phosphatase 1K (PP2C domain containing)	DER (teen > adult)	[36]
<i>PPOX</i>	protoporphyrinogen oxidase	DER (teen > child)	[36]
<i>PRDX1</i>	peroxiredoxin 1	Rare mutation	[15]
<i>PRDX1</i>	peroxiredoxin 1	Protein (DLPFC)	[37]
<i>PRDX2</i>	peroxiredoxin 2	Rare mutation	[15]
<i>PRDX2</i>	peroxiredoxin 2	Protein (DLPFC/CC)	[37]
<i>PRODH</i>	proline dehydrogenase (oxidase) 1	CNV (22q11.2)	[32]
<i>PRODH</i>	proline dehydrogenase (oxidase) 1	CNV	[18]
<i>PTCD3</i>	Pentatricopeptide repeat domain 3	Peak Expression (15-25y)	[35]
<i>PTRH2</i>	peptidyl-tRNA hydrolase 2	DER (teen > adult)	[36]

Gene Symbol	Description	SZ Association Type	Reference
PXMP2	peroxisomal membrane protein 2, 22kDa	CNV	[18]
PYCR1	pyrroline-5-carboxylate reductase 1	Peak Expression (15-25y)	[35]
QDPR	quinoid dihydropteridine reductase	Protein (DLPFC)	[37]
QDPR	quinoid dihydropteridine reductase	Peak Expression (15-25y)	[35]
QDPR	quinoid dihydropteridine reductase	DER (teen > child)	[36]
RAB8B	RAB8B, member RAS oncogene family	DER (teen > adult)	[36]
RAB8B	RAB8B, member RAS oncogene family	DER (teen > child)	[36]
RG9MTD1	RNA (guanine-9-) methyltransferase domain containing 1	CNV	[18]
RNMTL1	RNA methyltransferase like 1	CNV	[18]
RNMTL1	RNA methyltransferase like 1	DER (teen > adult)	[36]
RPL34	ribosomal protein L34	DER (teen > adult)	[36]
SARS	seryl-tRNA synthetase	Peak Expression (15-25y)	[35]
SCCPDH	saccharopine dehydrogenase (putative)	Peak Expression (15-25y)	[35]
SCO1	SCO cytochrome oxidase deficient homolog 1 (yeast)	RNA (DG)	[34]
SCP2	sterol carrier protein 2	Peak Expression (15-25y)	[35]
SDHA	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)	RNA (DG)	[34]
SDHA	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)	Protein (ACC)	[37]
SDHB	succinate dehydrogenase complex, subunit B, iron sulfur (Ip)	RNA (DLPFC pyramidal)	[5]
SFXN2	sideroflexin 2	GWAS (PGC)	[12]
SFXN2	sideroflexin 2	DER (teen > child)	[36]
SFXN4	sideroflexin 4	Peak Expression (15-25y)	[35]
SHMT1	serine hydroxymethyltransferase 1 (soluble)	Peak Expression (15-25y)	[35]
SHMT1	serine hydroxymethyltransferase 1 (soluble)	DER (teen > adult)	[36]
SHMT2	serine hydroxymethyltransferase 2 (mitochondrial)	GWAS (PGC)	[12]
SLC25A1	solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	CNV (22q11.2)	[32]
SLC25A1	solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	CNV	[18]
SLC25A12	solute carrier family 25 (mitochondrial carrier, Aralar), member 12	<i>de novo</i> mutation	[14]
SLC25A16	solute carrier family 25 (mitochondrial carrier; Graves disease autoantigen), member 16	DER (teen > adult)	[36]
SLC25A19	solute carrier family 25 (mitochondrial deoxynucleotide carrier), member 19	Peak Expression (15-25y)	[35]
SLC25A23	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23	<i>de novo</i> mutation	[14]
SLC25A27	solute carrier family 25, member 27	Peak Expression (15-25y)	[35]
SLC25A29	solute carrier family 25, member 29	DER (teen > adult)	[36]
SLC25A3	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3	Rare mutation	[15]
SLC25A3	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3	Peak Expression (15-25y)	[35]
SLC25A32	solute carrier family 25, member 32	Peak Expression (15-25y)	[35]
SLC25A34	solute carrier family 25, member 34	Peak Expression (15-25y)	[35]
SLC25A4	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4	RNA (DLPFC pyramidal)	[5]

Gene Symbol	Description	SZ Association Type	Reference
<i>SLC25A4</i>	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4	RNA (DG)	[34]
<i>SND1</i>	staphylococcal nuclease domain containing 1	<i>de novo</i> mutation	[14]
<i>SOD1</i>	superoxide dismutase 1, soluble (amyotrophic lateral sclerosis 1 (adult))	Peak Expression (15-25y)	[35]
<i>SPG7</i>	spastic paraplegia 7, paraplegin (pure and complicated autosomal recessive)	Peak Expression (15-25y)	[35]
<i>SPTLC2</i>	serine palmitoyltransferase, long chain base subunit 2	Peak Expression (15-25y)	[35]
<i>STAR</i>	steroidogenic acute regulator	DER (teen > child)	[36]
<i>SUCLA2</i>	succinate-CoA ligase, ADP-forming, beta subunit	Rare mutation	[15]
<i>TATDN3</i>	TatD DNase domain containing 3	Peak Expression (15-25y)	[35]
<i>TDRKH</i>	tudor and KH domain containing	<i>de novo</i> mutation	[14]
<i>TDRKH</i>	tudor and KH domain containing	DER (teen > child)	[36]
<i>THEM5</i>	thioesterase superfamily member 5	DER (teen > child)	[36]
<i>TIMM17A</i>	translocase of inner mitochondrial membrane 17 homolog A (yeast)	RNA (DG)	[34]
<i>TIMM17A</i>	translocase of inner mitochondrial membrane 17 homolog A (yeast)	RNA (PFC area 9)	[13]
<i>TIMM22</i>	translocase of inner mitochondrial membrane 22 homolog (yeast)	Peak Expression (15-25y)	[35]
<i>TIMM8A</i>	translocase of inner mitochondrial membrane 8 homolog A (yeast)	Peak Expression (15-25y)	[35]
<i>TIMM8B</i>	translocase of inner mitochondrial membrane 8 homolog B (yeast)	Peak Expression (15-25y)	[35]
<i>TMEM11</i>	transmembrane protein 11	DER (teen > adult)	[36]
<i>TMEM11</i>	transmembrane protein 11	DER (teen > child)	[36]
<i>TMEM14C</i>	transmembrane protein 14C	Peak Expression (15-25y)	[35]
<i>TMEM70</i>	transmembrane protein 70	Peak Expression (15-25y)	[35]
<i>TMTC1</i>	transmembrane and tetratricopeptide repeat containing 1	GWAS (PGC)	[12]
<i>TOMM20</i>	translocase of outer mitochondrial membrane 20 homolog (yeast)	Peak Expression (15-25y)	[35]
<i>TOMM70A</i>	translocase of outer mitochondrial membrane 70 homolog A (<i>S. cerevisiae</i>)	CNV	[18]
<i>TRAP1</i>	TNF receptor-associated protein 1	Peak Expression (15-25y)	[35]
<i>TUFM</i>	Tu translation elongation factor, mitochondrial	CNV	[18]
<i>TUFM</i>	Tu translation elongation factor, mitochondrial	Protein (DLPFC)	[37]
<i>TXN</i>	thioredoxin	Protein (DLPFC)	[37]
<i>TXNRD2</i>	thioredoxin reductase 2	CNV (22q11.2)	[32]
<i>TXNRD2</i>	thioredoxin reductase 2	CNV	[18]
<i>UQCRC1</i>	ubiquinol-cytochrome c reductase core protein I	Protein (DLPFC)	[37]
<i>UQCRC1</i>	ubiquinol-cytochrome c reductase core protein I	DER (teen > child)	[36]
<i>UQCRC2</i>	ubiquinol-cytochrome c reductase core protein II	CNV	[18]
<i>UQCRFS1</i>	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1	RNA (DLPFC pyramidal)	[5]
<i>UQCRFS1</i>	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1	RNA (DG)	[34]
<i>UQCRQ</i>	ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kDa	RNA (DLPFC pyramidal)	[5]
<i>USMG5</i>	upregulated during skeletal muscle growth 5 homolog (mouse)	GWAS (PGC)	[12]
<i>USMG5</i>	upregulated during skeletal muscle growth 5 homolog (mouse)	DER (teen > adult)	[36]

Gene Symbol	Description	SZ Association Type	Reference
VAMP1	vesicle-associated membrane protein 1 (synaptobrevin 1)	Peak Expression (15-25y)	[35]
VAMP1	vesicle-associated membrane protein 1 (synaptobrevin 1)	DER (teen > child)	[36]
VDAC1	voltage-dependent anion channel 1	<i>de novo</i> mutation	[14]
VDAC1	voltage-dependent anion channel 1	Protein (DLPFC)	[37]
VDAC2	voltage-dependent anion channel 2	Protein (DLPFC)	[37]

Key: CNV (copy number variant), DLPFC (dorsolateral prefrontal cortex), DG (dentate gyrus), GWAS (genome-wide association study), DER (differentially expressed regions), PFC (prefrontal cortex), ACC (anterior cingulate cortex), PGC (psychiatric genomics consortium), CC (corpus callosum).

References:

- [5] Arion D, Corradi JP, Tang S, Datta D, Boothe F, He A, Cacace AM, Zaczek R, Albright CF, Tseng G, Lewis DA. Distinctive transcriptome alterations of prefrontal pyramidal neurons in schizophrenia and schizoaffective disorder. *Molecular psychiatry*. 2015; DOI: 10.1038/mp.2014.171.
- [12] Schizophrenia Working Group of the Psychiatric Genomics Consortium. Biological insights from 108 schizophrenia-associated genetic loci. *Nature*. 2014;511(7510):421-427.
- [13] Middleton FA, Mirnics K, Pierri JN, Lewis DA, Levitt P. Gene expression profiling reveals alterations of specific metabolic pathways in schizophrenia. *J Neurosci*. 2002;22(7):2718-2729.

- [14] Fromer M, Pocklington AJ, Kavanagh DH, Williams HJ, Dwyer S, Gormley P, Georgieva L, Rees E, Palta P, Ruderfer DM, Carrera N, Humphreys I, Johnson JS, Roussos P, Barker DD, Banks E, Milanova V, Grant SG, Hannon E, Rose SA, Chambert K, Mahajan M, Scolnick EM, Moran JL, Kirov G, Palotie A, McCarroll SA, Holmans P, Sklar P, Owen MJ, Purcell SM, O'Donovan MC. De novo mutations in schizophrenia implicate synaptic networks. *Nature*. 2014;506(7487):179-184.
- [15] Purcell SM, Moran JL, Fromer M, Ruderfer D, Solovieff N, Roussos P, O'Dushlaine C, Chambert K, Bergen SE, Kahler A, Duncan L, Stahl E, Genovese G, Fernandez E, Collins MO, Komiyama NH, Choudhary JS, Magnusson PK, Banks E, Shakir K, Garimella K, Fennell T, DePristo M, Grant SG, Haggarty SJ, Gabriel S, Scolnick EM, Lander ES, Hultman CM, Sullivan PF, McCarroll SA, Sklar P. A polygenic burden of rare disruptive mutations in schizophrenia. *Nature*. 2014;506(7487):185-190.
- [18] Szatkiewicz JP, O'Dushlaine C, Chen G, Chambert K, Moran JL, Neale BM, Fromer M, Ruderfer D, Akterin S, Bergen SE, Kahler A, Magnusson PK, Kim Y, Crowley JJ, Rees E, Kirov G, O'Donovan MC, Owen MJ, Walters J, Scolnick E, Sklar P, Purcell S, Hultman CM, McCarroll SA, Sullivan PF. Copy number variation in schizophrenia in Sweden. *Molecular psychiatry*. 2014;19:762-773.
- [19] Kirov G, Pocklington AJ, Holmans P, Ivanov D, Ikeda M, Ruderfer D, Moran J, Chambert K, Toncheva D, Georgieva L, Grozeva D, Fjodorova M, Wollerton R, Rees E, Nikolov I, van de Lagemaat LN, Bayes A, Fernandez E, Olason PI, Bottcher Y, Komiyama NH, Collins MO, Choudhary J, Stefansson K, Stefansson H, Grant SG, Purcell S, Sklar P, O'Donovan MC, Owen MJ. De novo CNV analysis implicates specific abnormalities of postsynaptic signalling complexes in the pathogenesis of schizophrenia. *Molecular psychiatry*. 2012;17(2):142-153.

- [32] Karayiorgou M, Simon TJ, Gogos JA. 22q11.2 microdeletions: linking DNA structural variation to brain dysfunction and schizophrenia. *Nat Rev Neurosci*. 2010;11(6):402-416.
- [33] Li X, Zhang W, Tang J, Tan L, Luo XJ, Chen X, Yao YG. Do nuclear-encoded core subunits of mitochondrial complex I confer genetic susceptibility to schizophrenia in Han Chinese populations? *Sci Rep*. 2015;5:11076.
- [34] Altar CA, Jurata LW, Charles V, Lemire A, Liu P, Bukhman Y, Young TA, Bullard J, Yokoe H, Webster MJ, Knable MB, Brockman JA. Deficient hippocampal neuron expression of proteasome, ubiquitin, and mitochondrial genes in multiple schizophrenia cohorts. *Biol Psychiatry*. 2005;58(2):85-96.
- [35] Harris LW, Lockstone HE, Khaitovich P, Weickert CS, Webster MJ, Bahn S. Gene expression in the prefrontal cortex during adolescence: implications for the onset of schizophrenia. *BMC Med Genomics*. 2009;2:28.

- [36] Jaffe AE, Shin J, Collado-Torres L, Leek JT, Tao R, Li C, Gao Y, Jia Y, Maher BJ, Hyde TM, Kleinman JE, Weinberger DR. Developmental regulation of human cortex transcription and its clinical relevance at single base resolution. *Nat Neurosci*. 2015;18(1):154-161.
- [37] English JA, Pennington K, Dunn MJ, Cotter DR. The neuroproteomics of schizophrenia. *Biol Psychiatry*. 2011;69(2):163-172.