

Supplementary Table 8: Genes associated with mitochondrial and ion channel function altered in schizophrenia and in response to THC treatments

Gene class	Acute THC dose	Chronic THC doses	Schizophrenia
Mitochondrial genes			
MT-ATP6	✓		
UQCRBP1	✓		
SDHA	✓		
DDIT4	✓		
DDX28		✓	
DNAJA3		✓	
HAX1		✓	
KIAA1683		✓	
TRIAP1		✓	
RARS		✓	
CS		✓	
CYB5R3		✓	
CYC1		✓	
DIABLO		✓	
GBF1		✓	
HADH		✓	
MRPL28		✓	
MRPS18B		✓	
PTRF		✓	
SDHB		✓	
UQCRC2		✓	
YRDC		✓	
MARS2		✓	
MAVS		✓	
SLC25A4		✓	
MRPL17		✓	
MT-ND4	✓	✓	
MT-CO1	✓	✓	
MT-CO2	✓	✓	
MT-CO3	✓	✓	
MT-ND4L	✓	✓	
ADPRHL2	✓	✓	
GRPEL1	✓	✓	
ALDH18A1	✓	✓	
COQ10B	✓	✓	
COX7A2	✓	✓	
DMPK	✓	✓	
HAGH	✓	✓	

MTHFD2	✓	✓	
MGST1	✓	✓	
MTFP1	✓	✓	
MRPL14	✓	✓	
MRPL49	✓	✓	
MRPL54	✓	✓	
MRPS7	✓	✓	
PMAIP1	✓	✓	
PDK2	✓	✓	
RGS2	✓	✓	
RPS3	✓	✓	
SGK1	✓	✓	
SLC25A32	✓	✓	
TFB2M	✓	✓	
ME3			✓
WNT genes			
APC	✓	✓	
DDIT3	✓	✓	
HIC1	✓	✓	
BTRC	✓	✓	
DDB1	✓	✓	
DKK3	✓	✓	
SOX5	✓	✓	
SOX12	✓	✓	
UBC	✓	✓	
ZBED3	✓		
PTPRZ1	✓		
WNT16		✓	
FZD2		✓	
GSK3B		✓	
TNKS		✓	
CSNK2A2		✓	
BCL9		✓	
EP300		✓	
DKK1		✓	
FZD1		✓	
CDH10		✓	
TSC1		✓	
TCF4			✓
ACVR1			✓
DAB2			✓
NOTUM			✓
RSPO3			✓
TRABD2B			✓

WIF1			✓
WNT10A			✓
WNT5A			✓
WNT6			✓
KREMEN1			✓
ROR1			✓
RNF43			✓
SOSTDC1			✓
TLE2			✓
WLS			✓
Ion channel genes			
CACNG7	✓	✓	
GRID2	✓	✓	
GRIK1	✓	✓	
ITPR2	✓	✓	
LRRC8E	✓	✓	
KCNN3	✓	✓	
KCNK15	✓		
KCNF1	✓		
KCNA4	✓	✓	
KCNE4	✓	✓	
KCNJ10	✓	✓	
RYR3	✓	✓	
TRPV1	✓	✓	
TMEM38A	✓		
FXD6		✓	
ASIC1		✓	
CHRNA9		✓	
KCNT2		✓	
KCNK6		✓	
KCNJ2		✓	
KCNQ1		✓	
TMEM63A		✓	
ATP1A2			✓
BEST1			✓
CALHM2			✓
CACNA2D1			✓
CACNG6			✓
CACNA1G			✓
CLCA2			✓
CLIC2			✓
CHRNA1			✓
CLDN10			✓
GABRE			✓

GABRQ			✓
GRIK2			✓
HFE			✓
PKD1L3			✓
KCNMB2			✓
KCNU1			✓
KCNA1			✓
KCNA5			✓
KCNA6			✓
KCNAB1			✓
KCNE3			✓
KCNH2			✓
P2RX7			✓
SFXN3			✓
SCN2B			✓
TRPV4			✓
TMC1			✓
CNTN2			✓