Enrichment analysis report

Enrichment by GO Processes

#	Processes	Total	pValue	Min FDR	p-value	FDR	In Data	Genes from Active Data
1	cellular metabolic process	9418	9.28E-44	4.86E-40	9.28E-44	4.86E-40	617	FBXO45, APG3, DNAJ, DNF668, PACT, Forkhead box protein D4-like 2, GTF2IRD2B, GSK3, PHAP1 (pp32), RFC4, BTEB4, LOC440093, ZSCAN4, dUTPase (DUT), CTP synthase, POLE3-POLE4 complex, Twinfilin, Peroxiredoxin, Tubulin beta, CAPER, DPM2 (mg), MIWI, TRUB2, FIGNL1, FUBP1, Ku70/80, REV-ERBalpha, IRF7, FAF1, Dyskerin (NAP57), CBorf105, TK2, NOLA, TB-alpha, SC4MOL, hnRNP U, CREB1, PCNA, PDK1, JMJD2A, ZNF441, Probable cation-transporting ATPase 13A3, GSTM2, C/EBP, TOMM40, MCM6, MGST3, CTE2, Heterochromatin H2AC, Ku80, Uncoortin 2, SNRNP25, TpbG, GRINL1A, PERC, Sen34, CSorf41, Tubulin alpha-1B, MANEA, HMGU7, CAD, FARSB, hnRNP H1, IKBZ, Cyclophilin H, GADD45 alpha, Chk2, YB-1, DDX54, PSMB3, MCM3, EGR1, RNPS1, PURZ, ACTC, MRM1, PTOP, HAT1, ABCC4, RBM6, HSP90 alpha, INTS6, RAD18, ING4, SSRP1, G3BP1 (hdhv10), PSMD1, Forkhead box protein D4-like 2, SLA/LP, JOSD3, Ku70, PSMD2, C/EBPgamma, HIST1H2BD, EGR2 (Krox20), Casein kinase I, c-Jun/c-Fos, ROCK, PP2A regulatory, FASP1, ZNF425, CARM1, Importin (karyopherin)-beta, DDB1, ZNF561, Dynein, axonemal, heavy chains, EAF1, EWS, Jun(d)-Fos, HIST1H2BG, Histone H3.3, TFE3, Serotonin receptor, EWS/WT1 fusion protein, Cluorf124, HIST2H2BC, ATP7FA, EPC1, CHAF1 subunit B, ACACA, PAXIP1L, PTMA, hnRNP R, hnRNP L, NAP2, RNF12, HIST2H2BF, RFX3, PSMC6, XRCC2, SLC25A10, ZBTB10, ZNF491, AP-1, Galphai(i)-specific amine GPCRs, AKD1, SLBP, E2NU(BC13), ACLY, PSMD14, PAF49, NF-kB2 (p100), TXNIP (VDUP1), WARS, KLF2, APLF, GADD45 gamma, ATP1A1, TALDO, TARDBP (TDP43), C17orf79, APOA2, SPSY, SLC19A1, eIF4A2, PSMB7, EWS/EIAF fusion protein, Cyclin L1, RPA1, C10orf119, LSM2, ENO1, Tubulin beta 1, C/EBP zeta, FBI-1 (Pokemon), WDR77, STRA13, HDAC1, Forkhead box protein D4-like 2, Tubulin alpha, ARD1, Rad52, MCPIP, HIST2H3B, Forkhead box protein D4-like 6, NF-kB, HIST1H2AK, TADA1L, BTG2, SETDB1, ZNF431, HIST2H2BE, RelB (NF-kB subunit), FosB/JunB, PCYOX1, RAD23B, TAFs, PCPH, Calmodulin, ZNF479, DIRAS2, PDWA (hestis), CaMK II gamma, ZNF708, MSX2, SPEE, MCM2, ATP5G1, Histone H1.1, GMPS, HSC70, UGUK, POLD reg (p50), ZNF791, ZNF226, IRE1, Ac/p CG beta, Cyclin T2, Ataxin-7, ZNF678, RHO6, Thyroid hormone receptor, PMP34, VARSL, Histone H3, Aggrecanase-1, WAC, POLD cat (p125), HSP60, SOD1, GLUT4, mTERF02, TCF1-zeta-1, GINS2, PUS7, PSDH alpha, MRPL12, MED29, c-fos, ZNF213, MOGAT3, ASK13, MCM5, MAP1LC3B, GLT25D1, PLC-beta, JunD, DPH2, UBE2G1, Ephrin-A, HSP90, DPY30, Gemin5, RPP40, Calpain 1(mu), Zinc finger protein 394, EWS/FLI1 fusion protein, RBM14, PRDX4, Histone H2BO, SMVT, ZNF674, NOLA2 (NHP2), ATP5C, CAA protein, LUMN, LDHB, LDHA, LIPB2, UDCRQPC, GCSH, TFIIF, alpha subunit, HIST2H2AB, FOXD4L4, UQCRH, ERD1alpha, DNA polymerase mu, HIST1H2AH, NDPK A, FASTKD3, FUS/DDIT3 fusion protein, NDUFAB1, HAND2, DUSP8, Puromycin-sensitive aminopeptidase, NDUFA1, DNAH1, IPPK, SFR1 (SF2), CERCAM, NeuN, NCOA3 (pCIP/SRC3), MeR, NFEPP5, FANCD2, HSP70, PURB, EAR2, WIP1, RUVBL2, JMJD3, POLE3 (YB1), NUP98/HHEX fusion protein, Histone H2A.o, Rad1, hnRNP C, DHFR1, Ndg2, Utp15, ATP5G, NDPK complex, RalA, FASN, Tyk2, SNRPD1 (SMD1), Forkhead box protein D4-like 6, SLC25A39, FOXD4, USP52, PAFAH alpha 1b3, ATP-3, MUSE1, HEXIM1, RAD1, Rad51, WDR5, CITC, NS1-BP, TFIIE, beta subunit, GTF2IRD2 (WBS7), Probable D-tyrosyl-tRNA(Tyr), Claspin, HIST1H2BN, SAKS1, pdlaIpha, S-acyl fatty acid synthase thioesterase, medium chain, cPLA2 alpha, LEO1, HIST1H2AE, mRNA, MRP, ERAP140, HMGCL, CAT1, Actin, p19, NUDT5, TCF1-zeta-1/2, ZNF454, PP1-cat, VKORC1L1, Rac3, Forkhead box protein D4-like 6, eIF4A, SERB, Histone H2, HP1 gamma, JAK3, PPL3, URI, Histone H2A, WRN, DHFR, ANAPC5, Elk-1, Blgn98, ZFP36(Tristetraprolin), c-Jun/c-Jun, PA1, Splicing factor 4, PHF13, NDUFS6, Histone H1.2, snRNP-F, CHCHD4, C4, FTL51, MAZ, Foxd4L1, ADSL, RPP30, NDPR 8, MDH1, NOM1, PSMA2, NIPK, HP1, UBL4A, FBXO10, PURB, RBM5, Forkhead box protein D4-like 2, SBNO2, JPO1, PLCE, FAST kinase domain-containing protein 3, RBM4, F-box only protein 10, NUP37, SAP25, Dcp1b, Nucleolar protein 8, DHX15, SET, Histone H2B, EWS/ERG fusion protein, TpsS(mg2, DDX46, CNT2, Rab-3A, FOXD4L5, FLAD1, Serf65, ZNF721, PYCS, PURL, Tubulin alpha 3, SNRPA, TBR1, TCOF1, NF-kB p52/RelB, FLJ10292, ZNF394, HIST1H3D, GSPT1, Forkhead box protein D4-like 6, eIF4A, Histone H4, RCOR3, LCMR1, KAD8, DHODH, NUP98, ATP13A3, SF4, SERTAD1, ROCK1, ACSL1, NIP3, TBDN100, KLF6, CENPF, TBX20, MAT2A, Betacellulin, NUP98/HOXA9 fusion protein, c-Jun, HIST1H2AD, C1orf69, AAR5, Actin muscle, SOX30, Frataxin, Phosphatase regulator (inhibitor), Octanoyl-Holo-acp, p23 co-chaperone, BCCIP, HIST1H2AG, CENP-H, Protein kinase G, PC2, Ran, Tubulin alpha 3E, Glycosyltransferase 25 family member 3 precursor, RL1, Elp1, POLN, PGAM4, Histone H1, SP3, Ca-ATPase2, TREX2, NEUR1, Aciculin, USP5, Histone H1.1, PURA, Cyclophilin A, ASGR2, CDK2, 3'HEXO, KLHDC3, SOCS1, SET/NUP214 fusion protein, Tubulin (in microtubules), CDC45L, BPA, 14-3-3, VEGF-B
2	nitrogen compound metabolic process	5560	5.23E-43	1.3E-39	5.23E-43	1.3E-39	432	FBXO45, APG3, DNAJ, DNF668, PACT, Forkhead box protein D4-like 2, GTF2IRD2B, GSK3, PHAP1 (pp32), RFC4, BTEB4, LOC440093, ZSCAN4, dUTPase (DUT), CTP synthase, POLE3-POLE4 complex, Twinfilin, Peroxiredoxin, Tubulin beta, CAPER, DPM2 (mg), MIWI, TRUB2, FIGNL1, FUBP1, Ku70/80, REV-ERBalpha, IRF7, FAF1, Dyskerin (NAP57), CBorf105, TK2, NOLA, TB-alpha, SC4MOL, hnRNP U, CREB1, PCNA, PDK1, JMJD2A, ZNF441, Probable cation-transporting ATPase 13A3, GSTM2, C/EBP, TOMM40, MCM6, MGST3, CTE2, Heterochromatin H2AC, Ku80, Uncoortin 2, SNRNP25, TpbG, GRINL1A, PERC, Sen34, CSorf41, Tubulin alpha-1B, MANEA, HMGU7, CAD, FARSB, hnRNP H1, IKBZ, Cyclophilin H, GADD45 alpha, Chk2, YB-1, DDX54, PSMB3, MCM3, EGR1, RNPS1, PURZ, ACTC, MRM1, PTOP, HAT1, ABCC4, RBM6, HSP90 alpha, INTS6, RAD18, ING4, SSRP1, G3BP1 (hdhv10), PSMD1, Forkhead box protein D4-like 2, SLA/LP, JOSD3, Ku70, PSMD2, C/EBPgamma, HIST1H2BD, EGR2 (Krox20), Casein kinase I, c-Jun/c-Fos, ROCK, PP2A regulatory, FASP1, ZNF425, CARM1, Importin (karyopherin)-beta, DDB1, ZNF561, Dynein, axonemal, heavy chains, EAF1, EWS, Jun(d)-Fos, HIST1H2BG, Histone H3.3, TFE3, Serotonin receptor, EWS/WT1 fusion protein, Cluorf124, HIST2H2BC, ATP7FA, EPC1, CHAF1 subunit B, ACACA, PAXIP1L, PTMA, hnRNP R, hnRNP L, NAP2, RNF12, HIST2H2BF, RFX3, PSMC6, XRCC2, SLC25A10, ZBTB10, ZNF491, AP-1, Galphai(i)-specific amine GPCRs, AKD1, SLBP, E2NU(BC13), ACLY, PSMD14, PAF49, NF-kB2 (p100), TXNIP (VDUP1), WARS, KLF2, APLF, GADD45 gamma, ATP1A1, TALDO, TARDBP (TDP43), C17orf79, APOA2, SPSY, eIF4A2, PSMB7, EWS/EIAF fusion protein, Cyclin L1, RPA1, C10orf119, LSM2, ENO1, Tubulin beta 1, C/EBP zeta, FBI-1 (Pokemon), WDR77, STRA13, HDAC1, Forkhead box protein D4-like 2, Tubulin alpha, ARD1, Rad52, MCPIP, HIST2H3B, Forkhead box protein D4-like 6, NF-kB, HIST1H2AK, TADA1L, BTG2, SETDB1, ZNF431, HIST2H2BE, RelB (NF-kB subunit), FosB/JunB, PCYOX1, RAD23B, TAFs, PCPH, Calmodulin, ZNF479, DIRAS2, ZNF708, MSX2, SPEE, MCM2, ATP5G1, Histone H1.1, GMPS, HSC70, POLD reg (p50), ZNF791, ZNF226, IRE1, Ac/p CG beta, Cyclin T2, Ataxin-7, ZNF678, RHO6, Thyroid hormone receptor, VARSL, Histone H3, WAC, POLD cat (p125), HSP60, SOD1, mTERF02, GINS2, PUS7, MRPL12, MED29, c-fos, ZNF213, ASK13, MCM5, PLC-beta, JunD, HSP90, DPY30, Gemin5, RPP40, Calpain 1(mu), Zinc finger protein 394, EWS/FLI1 fusion protein, RBM14, PRDX4, Histone H2BO, SMVT, ZNF674, NOLA2 (NHP2), ATP5C, CAA protein, FUMH, JunB, TFIID 31 kDa subunit, TRIP13, C16orf42, HIST2H2AC, CHP, PLA2, LPN3, LDHA, LDHB, LIPB2, UDCRQPC, GCSH, TFIIF, alpha subunit, HIST2H2AB, FOXD4L4, UQCRH, ERD1alpha, DNA polymerase mu, HIST1H2AH, NDPK A, FASTKD3, FUS/DDIT3 fusion protein, NDUFAB1, LIN52, HAND2, DUSP8, Puromycin-sensitive aminopeptidase, NDUFA1, Myosin I, DNAH1, IPPK, SFR1 (SF2), CERCAM, NeuN, NCOA3 (pCIP/SRC3), MeR, NFEPP5, FANCD2, HSP70, PURB, EAR2, WIP1, RUVBL2, JMJD3, POLE3 (YB1), NUP98/HHEX fusion protein, Histone H2A.o, Rad1, hnRNP C, DHFR1, Ndg2, Utp15, ATP5G, NDPK complex, RalA, FASN, Tyk2, SNRPD1 (SMD1), Forkhead box protein D4-like 6, SLC25A39, FOXD4, USP52, PAFAH alpha 1b3, ATP-3, MUSE1, HEXIM1, RAD1, Rad51, WDR5, CITC, NS1-BP, TFIIE, beta subunit, GTF2IRD2 (WBS7), Probable D-tyrosyl-tRNA(Tyr), Claspin, HIST1H2BN, SAKS1, pdlaIpha, S-acyl fatty acid synthase thioesterase, medium chain, cPLA2 alpha, LEO1, HIST1H2AE, mRNA, MRP, ERAP140, HMGCL, CAT1, Actin, p19, NUDT5, ZNF454, Rac3, Forkhead box protein D4-like 6, Histone H2, HP1 gamma, PPL3, URI, Histone H2A, WRN, DHFR, Elk-1, ZFP36(Tristetraprolin), c-Jun/c-Jun, PA1, Splicing factor 4, PHF13, Histone H1.2, snRNP-F, CHCHD4, C4, FTL51, MAZ, Foxd4L1, ADSL, RPP30, NDPR 8, MDH1, NOM1, PSMA2, NIPK, HP1, UBL4A, FBXO10, PURB, RBM5, Forkhead box protein D4-like 2, SBNO2, JPO1, PLCE, FAST kinase domain-containing protein 3, RBM4, F-box only protein 10, NUP37, SAP25, Dcp1b, Nucleolar protein 8, DHX15, SET, Histone H2B, EWS/ERG fusion protein, TpsS(mg2, DDX46, CNT2, Rab-3A, FOXD4L5, FLAD1, Serf65, ZNF721, PYCS, PURL, Tubulin alpha 3, SNRPA, TBR1, TCOF1, NF-kB p52/RelB, FLJ10292, ZNF394, HIST1H3D, GSPT1, Forkhead box protein D4-like 6, eIF4A, Histone H4, RCOR3, LCMR1, KAD8, DHODH, NUP98, ATP13A3, SF4, SERTAD1, NIP3, TBDN100, KLF6, CENPF, TBX20, MAT2A, Betacellulin, NUP98/HOXA9 fusion protein, c-Jun, HIST1H2AD, C1orf69, AAR5, Actin muscle, SOX30, Frataxin, Phosphatase regulator (inhibitor), p23 co-chaperone, BCCIP, HIST1H2AG, CENP-H, Protein kinase G, PC2, Ran, Tubulin alpha 3E, RL1, Elp1, POLN, PGAM4, Histone H1, SP3, Ca-ATPase2, TREX2, NEUR1, Aciculin, USP5, Histone H1.1, PURA, Cyclophilin A, ASGR2, CDK2, 3'HEXO, KLHDC3, SOCS1, SET/NUP214 fusion protein, Tubulin (in microtubules), CDC45L, BPA, 14-3-3
3	cellular nitrogen compound metabolic process	5490	7.46E-43	1.3E-39	7.46E-43	1.3E-39	428	FBXO45, APG3, DNAJ, DNF668, PACT, Forkhead box protein D4-like 2, GTF2IRD2B, GSK3, PHAP1 (pp32), RFC4, BTEB4, LOC440093, ZSCAN4, dUTPase (DUT), CTP synthase, POLE3-POLE4 complex, Twinfilin, Peroxiredoxin, Tubulin beta, CAPER, DPM2 (mg), MIWI, TRUB2, FIGNL1, FUBP1, Ku70/80, REV-ERBalpha, IRF7, FAF1, Dyskerin (NAP57), CBorf105, TK2, NOLA, TB-alpha, SC4MOL, hnRNP U, CREB1, PCNA, PDK1, JMJD2A, ZNF441, Probable cation-transporting ATPase 13A3, GSTM2, C/EBP, TOMM40, MCM6, MGST3, CTE2, Heterochromatin H2AC, Ku80, Uncoortin 2, SNRNP25, TpbG, GRINL1A, PERC, Sen34, CSorf41, Tubulin alpha-1B, MANEA, HMGU7, CAD, FARSB, hnRNP H1, IKBZ, Cyclophilin H, GADD45 alpha, Chk2, YB-1, DDX54, PSMB3, MCM3, EGR1, RNPS1, PURZ, ACTC, MRM1, PTOP, HAT1, ABCC4, RBM6, HSP90 alpha, INTS6, RAD18, ING4, SSRP1, G3BP1 (hdhv10), PSMD1, Forkhead box protein D4-like 2, SLA/LP, JOSD3, Ku70, PSMD2, C/EBPgamma, HIST1H2BD, EGR2 (Krox20), Casein kinase I, c-Jun/c-Fos, ROCK, PP2A regulatory, FASP1, ZNF425, CARM1, Importin (karyopherin)-beta, DDB1, ZNF561, Dynein, axonemal, heavy chains, EAF1, EWS, Jun(d)-Fos, HIST1H2BG, Histone H3.3, TFE3, Serotonin receptor, EWS/WT1 fusion protein, Cluorf124, HIST2H2BC, ATP7FA, EPC1, CHAF1 subunit B, ACACA, PAXIP1L, PTMA, hnRNP R, hnRNP L, NAP2, RNF12, HIST2H2BF, RFX3, PSMC6, XRCC2, SLC25A10, ZBTB10, ZNF491, AP-1, Galphai(i)-specific amine GPCRs, AKD1, SLBP, E2NU(BC13), ACLY, PSMD14, PAF49, NF-kB2 (p100), TXNIP (VDUP1), WARS, KLF2, APLF, GADD45 gamma, ATP1A1, TALDO, TARDBP (TDP43), C17orf79, APOA2, SPSY, eIF4A2, PSMB7, EWS/EIAF fusion protein, Cyclin L1, RPA1, C10orf119, LSM2, ENO1, Tubulin beta 1, C/EBP zeta, FBI-1 (Pokemon), WDR77, STRA13, HDAC1, Forkhead box protein D4-like 2, Tubulin alpha, ARD1, Rad52, MCPIP, HIST2H3B, Forkhead box protein D4-like 6, NF-kB, HIST1H2AK, TADA1L, BTG2, SETDB1, ZNF431, HIST2H2BE, RelB (NF-kB subunit), FosB/JunB, PCYOX1, RAD23B, TAFs, PCPH, Calmodulin, ZNF479, DIRAS2, ZNF708, MSX2, SPEE, MCM2, ATP5G1, Histone H1.1, GMPS, HSC70, POLD reg (p50), ZNF791, ZNF226, IRE1, Ac/p CG beta, Cyclin T2, Ataxin-7, ZNF678, RHO6, Thyroid hormone receptor, VARSL, Histone H3, WAC, POLD cat (p125), HSP60, SOD1, mTERF02, GINS2, PUS7, MRPL12, MED29, c-fos, ZNF213, ASK13, MCM5, PLC-beta, JunD, HSP90, DPY30, Gemin5, RPP40, Calpain 1(mu), Zinc finger protein 394, EWS/FLI1 fusion protein, RBM14, PRDX4, Histone H2BO, SMVT, ZNF674, NOLA2 (NHP2), ATP5C, CAA protein, FUMH, JunB, TFIID 31 kDa subunit, TRIP13, C16orf42, HIST2H2AC, CHP, PLA2, LPN3, LDHA, LDHB, LIPB2, UDCRQPC, GCSH, TFIIF, alpha subunit, HIST2H2AB, FOXD4L4, UQCRH, ERD1alpha, DNA polymerase mu, HIST1H2AH, NDPK A, FASTKD3, FUS/DDIT3 fusion protein, NDUFAB1, LIN52, HAND2, DUSP8, Puromycin-sensitive aminopeptidase, NDUFA1, Myosin I, DNAH1, IPPK, SFR1 (SF2), CERCAM, NeuN, NCOA3 (pCIP/SRC3), MeR, NFEPP5, FANCD2, HSP70, PURB, EAR2, WIP1, RUVBL2, JMJD3, POLE3 (YB1), NUP98/HHEX fusion protein, Histone H2A.o, Rad1, hnRNP C, DHFR1, Ndg2, Utp15, ATP5G, NDPK complex, RalA, FASN, Tyk2, SNRPD1 (SMD1), Forkhead box protein D4-like 6, SLC25A39, FOXD4, USP52, PAFAH alpha 1b3, ATP-3, MUSE1, HEXIM1, RAD1, Rad51, WDR5, CITC, NS1-BP, TFIIE, beta subunit, GTF2IRD2 (WBS7), Probable D-tyrosyl-tRNA(Tyr), Claspin, HIST1H2BN, SAKS1, pdlaIpha, S-acyl fatty acid synthase thioesterase, medium chain, cPLA2 alpha, LEO1, HIST1H2AE, mRNA, MRP, ERAP140, HMGCL, CAT1, Actin, p19, NUDT5, ZNF454, Rac3, Forkhead box protein D4-like 6, Histone H2, HP1 gamma, PPL3, URI, Histone H2A, WRN, DHFR, Elk-1, ZFP36(Tristetraprolin), c-Jun/c-Jun, PA1, Splicing factor 4, PHF13, Histone H1.2, snRNP-F, CHCHD4, C4, FTL51, MAZ, Foxd4L1, ADSL, RPP30, NDPR 8, MDH1, NOM1, PSMA2, NIPK, HP1, UBL4A, FBXO10, PURB, RBM5, Forkhead box protein D4-like 2, SBNO2, JPO1, PLCE, FAST kinase domain-containing protein 3, RBM4, F-box only protein 10, NUP37, SAP25, Dcp1b, Nucleolar protein 8, DHX15, CS, SET, Histone H2B, EWS/ERG fusion protein, TpsS(mg2, DDX46, CNT2, Rab-3A, FOXD4L5, FLAD1, Serf65, ZNF721, PYCS, PURL, Tubulin alpha 3, SNRPA, TBR1, TCOF1, NF-kB p52/RelB, FLJ10292, ZNF394, HIST1H3D, GSPT1, Forkhead box protein D4-like 6, eIF4A, Histone H4, RCOR3, LCMR1, KAD8, DHODH, NUP98, ATP13A3, SF4, SERTAD1, NIP3, TBDN100, KLF6, CENPF, TBX20, MAT2A, Betacellulin, NUP98/HOXA9 fusion protein, c-Jun, HIST1H2AD, C1orf69, AAR5, Actin muscle, SOX30, Frataxin, Phosphatase regulator (inhibitor), p23 co-chaperone, BCCIP, HIST1H2AG, CENP-H, Protein kinase G, PC2, Ran, Tubulin alpha 3E, RL1, Elp1, POLN, PGAM4, Histone H1, SP3, Ca-ATPase2, TREX2, NEUR1, Aciculin, USP5, Histone H1.1, PURA, Cyclophilin A, ASGR2, CDK2, 3'HEXO, KLHDC3, SOCS1, SET/NUP214 fusion protein, Tubulin (in microtubules), CDC45L, BPA, 14-3-3
4	nucleobase-containing compound metabolic process	5145	1.86E-42	2.44E-38	1.86E-42	2.44E-38	408	FBXO45, APG3, DNAJ, DNF668, PACT, Forkhead box protein D4-like 2, GTF2IRD2B, GSK3, PHAP1 (pp32), RFC4, BTEB4, LOC440093, ZSCAN4, dUTPase (DUT), CTP synthase, POLE3-POLE4 complex, Twinfilin, Peroxiredoxin, Tubulin beta, CAPER, DPM2 (mg), MIWI, TRUB2, FIGNL1, FUBP1, Ku70/80, REV-ERBalpha, IRF7, FAF1, Dyskerin (NAP57), CBorf105, TK2, NOLA, TB-alpha, SC4MOL, hnRNP U, CREB1, PCNA, PDK1, JMJD2A, ZNF441, Probable cation-transporting ATPase 13A3, GSTM2, C/EBP, TOMM40, MCM6, MGST3, CTE2, Heterochromatin H2AC, Ku80, Uncoortin 2, SNRNP25, TpbG, GRINL1A, PERC, Sen34, CSorf41, Tubulin alpha-1B, MANEA, HMGU7, CAD, FARSB, hnRNP H1, IKBZ, Cyclophilin H, GADD45 alpha, Chk2, YB-1, DDX54, PSMB3, MCM3, EGR1, RNPS1, PURZ, ACTC, MRM1, PTOP, HAT1, ABCC4, RBM6, HSP90 alpha, INTS6, RAD18, ING4, SSRP1, G3BP1 (hdhv10), PSMD1, Forkhead box protein D4-like 2, SLA/LP, JOSD3, Ku70, PSMD2, C/EBPgamma, HIST1H2BD, EGR2 (Krox20), Casein kinase I, c-Jun/c-Fos, ROCK, PP2A regulatory, FASP1, ZNF425, CARM1, Importin (karyopherin)-beta, DDB1, ZNF561, Dynein, axonemal, heavy chains, EAF1, EWS, Jun(d)-Fos, HIST1H2BG, Histone H3.3, TFE3, Serotonin receptor, EWS/WT1 fusion protein, Cluorf124, HIST2H2BC, ATP7FA, EPC1, CHAF1 subunit B, ACACA, PAXIP1L, PTMA, hnRNP R, hnRNP L, NAP2, RNF12, HIST2H2BF, RFX3, PSMC6, XRCC2, SLC25A10, ZBTB10, ZNF491, AP-1, Galphai(i)-specific amine GPCRs, AKD1, SLBP, E2NU(BC13), ACLY, PSMD14, PAF49, NF-kB2 (p100), TXNIP (VDUP1), WARS, KLF2, APLF, GADD45 gamma, ATP1A1, TALDO, TARDBP (TDP43), C17orf79, APOA2, SPSY, eIF4A2, PSMB7, EWS/EIAF fusion protein, Cyclin L1, RPA1, C10orf119, LSM2, ENO1, Tubulin beta 1, C/EBP zeta, FBI-1 (Pokemon), WDR77, STRA13, HDAC1, Forkhead box protein D4-like 2, Tubulin alpha, ARD1, Rad52, MCPIP, HIST2H3B, Forkhead box protein D4-like 6, NF-kB, HIST1H2AK, TADA1L, BTG2, SETDB1, ZNF431, HIST2H2BE, RelB (NF-kB subunit), FosB/JunB, PCYOX1, RAD23B, TAFs, PCPH, Calmodulin, ZNF479, DIRAS2, ZNF708, MSX2, SPEE, MCM2, ATP5G1, Histone H1.1, GMPS, HSC70, POLD reg (p50), ZNF791, ZNF226, IRE1, Ac/p CG beta, Cyclin T2, Ataxin-7, ZNF678, RHO6, Thyroid hormone receptor, VARSL, Histone H3, WAC, POLD cat (p125), HSP60, SOD1, mTERF02, GINS2, PUS7, MRPL12, MED29, c-fos, ZNF213, ASK13, MCM5, PLC-beta, JunD, HSP90, DPY30, Gemin5, RPP40, Calpain 1(mu), Zinc finger protein 394, EWS/FLI1 fusion protein, RBM14, PRDX4, Histone H2BO, SMVT, ZNF674, NOLA2 (NHP2), ATP5C, CAA protein, FUMH, JunB, TFIID 31 kDa subunit, TRIP13, C16orf42, HIST2H2AC, CHP, PLA2, LPN3, LDHA, LDHB, LIPB2, UDCRQPC, GCSH, TFIIF, alpha subunit, HIST2H2AB, FOXD4L4, UQCRH, ERD1alpha, DNA polymerase mu, HIST1H2AH, NDPK A, FASTKD3, FUS/DDIT3 fusion protein, NDUFAB1, LIN52, HAND2, DUSP8, Puromycin-sensitive aminopeptidase, NDUFA1, Myosin I, DNAH1, IPPK, SFR1 (SF2), CERCAM, NeuN, NCOA3 (pCIP/SRC3), MeR, NFEPP5, FANCD2, HSP70, PURB, EAR2, WIP1, RUVBL2, JMJD3, POLE3 (YB1), NUP98/HHEX fusion protein, Histone H2A.o, Rad1, hnRNP C, DHFR1, Ndg2, Utp15, ATP5G, NDPK complex, RalA, FASN, Tyk2, SNRPD1 (SMD1), Forkhead box protein D4-like 6, SLC25A39, FOXD4, USP52, PAFAH alpha 1b3, ATP-3, MUSE1, HEXIM1, RAD1, Rad51, WDR5, CITC, NS1-BP, TFIIE, beta subunit, GTF2IRD2 (WBS7), Probable D-tyrosyl-tRNA(Tyr), Claspin, HIST1H2BN, SAKS1, pdlaIpha, S-acyl fatty acid synthase thioesterase, medium chain, cPLA2 alpha, LEO1, HIST1H2AE, mRNA, MRP, ERAP140, HMGCL, CAT1, Actin, p19, NUDT5, ZNF454, Rac3, Forkhead box protein D4-like 6, Histone H2, HP1 gamma, PPL3, URI, Histone H2A, WRN, DHFR, Elk-1, ZFP36(Tristetraprolin), c-Jun/c-Jun, PA1, Splicing factor 4, PHF13, Histone H1.2, snRNP-F, CHCHD4, C4, FTL51, MAZ, Foxd4L1, ADSL, RPP30, NDPR 8, MDH1, NOM1, PSMA2, NIPK, HP1, UBL4A, FBXO10, PURB, RBM5, Forkhead box protein D4-like 2, SBNO2, JPO1, PLCE, FAST kinase domain-containing protein 3, RBM4, F-box only protein 10, NUP37, SAP25, Dcp1b, Nucleolar protein 8, DHX15, CS, SET, Histone H2B, EWS/ERG fusion protein, TpsS(mg2, DDX46, CNT2, Rab-3A, FOXD4L5, FLAD1, Serf65, ZNF721, PYCS, PURL, Tubulin alpha 3, SNRPA, TBR1, TCOF1, NF-kB p52/RelB, FLJ10292, ZNF394, HIST1H3D, GSPT1, Forkhead box protein D4-like 6, eIF4A, Histone H4, RCOR3, LCMR1, KAD8, DHODH, NUP98, ATP13A3, SF4, SERTAD1, NIP3, TBDN100, KLF6, CENPF, TBX20, MAT2A, Betacellulin, NUP98/HOXA9 fusion protein, c-Jun, HIST1H2AD, C1orf69, AAR5, Actin muscle, SOX30, Frataxin, Phosphatase regulator (inhibitor), p23 co-chaperone, BCCIP, HIST1H2AG, CENP-H, Protein kinase G, PC2, Ran, Tubulin alpha 3E, RL1, Elp1, POLN, PGAM4, Histone H1, SP3, Ca-ATPase2, TREX2, NEUR1, Aciculin, USP5, Histone H1.1, PURA, Cyclophilin A, ASGR2, CDK2, 3'HEXO, KLHDC3, SOCS1, SET/NUP214 fusion protein, Tubulin (in microtubules), CDC45L, BPA, 14-3-3
5	heterocycle metabolic process	5330	5.92E-41	6.21E-38	5.92E-41	6.21E-38	415	FBXO45, APG3, DNAJ, DNF668, PACT, Forkhead box protein D4-like 2, GTF2IRD2B, GSK3, PHAP1 (pp32), RFC4, BTEB4, LOC440093, ZSCAN4, dUTPase (DUT), CTP synthase, POLE3-POLE4 complex, Twinfilin, Peroxiredoxin, Tubulin beta, CAPER, DPM2 (mg), MIWI, TRUB2, FIGNL1, FUBP1, Ku70/80, REV-ERBalpha, IRF7, FAF1, Dyskerin (NAP57), CBorf105, TK2, NOLA, TB-alpha, SC4MOL, hnRNP U, CREB1, PCNA, PDK1, JMJD2A, ZNF441, Probable cation-transporting ATPase 13A3, GSTM2, C/EBP, TOMM40, MCM6, MGST3, CTE2, Heterochromatin H2AC, Ku80, Uncoortin 2, SNRNP25, TpbG, GRINL1A, PERC, Sen34, CSorf41, Tubulin alpha-1B, MANEA, HMGU7, CAD, FARSB, hnRNP H1, IKBZ, Cyclophilin H, GADD45 alpha, Chk2, YB-1, DDX54, PSMB3, MCM3, EGR1, RNPS1, PURZ, ACTC, MRM1, PTOP, HAT1, ABCC4, RBM6, HSP90 alpha, INTS6, RAD18, ING4, SSRP1, G3BP1 (hdhv10), PSMD1, Forkhead box protein D4-like 2, SLA/LP, JOSD3, Ku70, PSMD2, C/EBPgamma, HIST1H2BD, EGR2 (Krox20), Casein kinase I, c-Jun/c-Fos, ROCK, PP2A regulatory, FASP1, ZNF425, CARM1, Importin (karyopherin)-beta, DDB1, ZNF561, Dynein, axonemal, heavy chains, EAF1, EWS, Jun(d)-Fos, HIST1H2BG, Histone H3.3, TFE3, Serotonin receptor, EWS/WT1 fusion protein, Cluorf124, HIST2H2BC, ATP7FA, EPC1, CHAF1 subunit B, ACACA, PAXIP1L, PTMA, hnRNP R, hnRNP L, NAP2, RNF12, HIST2H2BF, RFX3, PSMC6, XRCC2, SLC25A10, ZBTB10, ZNF491, AP-1, Galphai(i)-specific amine GPCRs, AKD1, SLBP, E2NU(BC13), ACLY, PSMD14, PAF49, NF-kB2 (p100), TXNIP (VDUP1), WARS, KLF2, APLF, GADD45 gamma, ATP1A1, TALDO, TARDBP (TDP43), C17orf79, APOA2, SPSY, eIF4A2, PSMB7, EWS/EIAF fusion protein, Cyclin L1, RPA1, C10orf119, LSM2, ENO1, Tubulin beta 1, C/EBP zeta, FBI-1 (Pokemon), WDR77, STRA13, HDAC1, Forkhead box protein D4-like 2, Tubulin alpha, ARD1, Rad52, MCPIP, HIST2H3B, Forkhead box protein D4-like 6, NF-kB, HIST1H2AK, TADA1L, BTG2, SETDB1, ZNF431, HIST2H2BE, RelB (NF-kB subunit), FosB/JunB, PCYOX1, RAD23B, TAFs, PCPH, Calmodulin, ZNF479, DIRAS2, ZNF708, MSX2, SPEE, MCM2, ATP5G1, Histone H1.1, GMPS, HSC70, POLD reg (p50), ZNF791, ZNF226, IRE1, Ac/p CG beta, Cyclin T2, Ataxin-7, ZNF678, RHO6, Thyroid hormone receptor, VARSL, Histone H3, WAC, POLD cat (p125), HSP60, SOD1, mTERF02, GINS2, PUS7, MRPL12, MED29, c-fos, ZNF213, ASK13, MCM5, PLC-beta, JunD, HSP90, DPY30, Gemin5, RPP40, Calpain 1(mu), Zinc finger protein 394, EWS/FLI1 fusion protein, RBM14, PRDX4, Histone H2BO, SMVT, ZNF674, NOLA2 (NHP2), ATP5C, CAA protein, FUMH, JunB, TFIID 31 kDa subunit, TRIP13, C16orf42, HIST2H2AC, CHP, PLA2, LPN3, LDHA, LDHB, LIPB2, UDCRQPC, GCSH, TFIIF, alpha subunit, HIST2H2AB, FOXD4L4, UQCRH, ERD1alpha, DNA polymerase mu, HIST1H2AH, NDPK A, FASTKD3, FUS/DDIT3 fusion protein, NDUFAB1, LIN52, HAND2, DUSP8, Puromycin-sensitive aminopeptidase, NDUFA1, Myosin I, DNAH1, IPPK, SFR1 (SF2), CERCAM, NeuN, NCOA3 (pCIP/SRC3), MeR, NFEPP5, FANCD2, HSP70, PURB, EAR2, WIP1, RUVBL2, JMJD3, POLE3 (YB1), NUP98/HHEX fusion protein, Histone H2A.o, Rad1, hnRNP C, DHFR1, Ndg2, Utp15, ATP5G, NDPK complex, RalA, FASN, Tyk2, SNRPD1 (SMD1), Forkhead box protein D4-like 6, SLC25A39, FOXD4, USP52, PAFAH alpha 1b3, ATP-3, MUSE1, HEXIM1, RAD1, Rad51, WDR5, CITC, NS1-BP, TFIIE, beta subunit, GTF2IRD2 (WBS7), Probable D-tyrosyl-tRNA(Tyr), Claspin, HIST1H2BN, SAKS1, pdlaIpha, S-acyl fatty acid synthase thioesterase, medium chain, cPLA2 alpha, LEO1, HIST1H2AE, mRNA, MRP, ERAP140, HMGCL, CAT1, Actin, p19, NUDT5, ZNF454, Rac3, Forkhead box protein D4-like 6, Histone H2, HP1 gamma, PPL3, URI, Histone H2A, WRN, DHFR, Elk-1, ZFP36(Tristetraprolin), c-Jun/c-