

GO group	z-score	# genes (observed)	# genes (expected)	list of genes	Locus IDs
sensory perception of chemical stimulus	6.19	9	1.54	OR2H2, TAS2R38, TAS2R60, OR5P3, TAS2R48, OR3A1, OR7A5, OR6C3, OR5I1	7932, 5726, 338398, 120066, 259294, 4994, 26659, 254786, 10798
UDP-N-acetylglucosamine metabolism	6.08	2	0.1	SLC35A3, GNE	23443, 10020
citrate metabolism	6.08	2	0.1	ACLY, ACO2	47, 50
response to UV	5.56	3	0.26	POLD1, UBE4B, REV1L	5424, 10277, 51455
lactation	5.56	3	0.26	PRLR, OXTR, PTHLH	5618, 5021, 5744
perception of taste	5.56	3	0.26	TAS2R38, TAS2R60, TAS2R48	5726, 338398, 259294
lipopolysaccharide metabolism	4.83	2	0.15	C1orf17, GNE	23127, 10020
lipopolysaccharide biosynthesis	4.83	2	0.15	C1orf17, GNE	23127, 10020
perception of smell	4.56	6	1.18	OR2H2, OR5P3, OR3A1, OR7A5, OR6C3, OR5I1	7932, 120066, 4994, 26659, 254786, 10798
vitamin/cofactor transport	4.43	4	0.62	SLC19A2, HPX, SLC22A16, FOLR1	10560, 3263, 85413, 2348
DNA metabolism	4.18	42	22.92	SLC19A2, DMAP1, ARID4B, MCM6, HDAC9, NFIB, RAG2, SOX6, ATF7IP, CSNK1D, POLD1, PNKP, PCNA, SE20-4, UBE2A, SMARCAD1, ERCC3, REV1L, BRCA2, SHPRH, TSPYL1, APEX1, CHD8, GADD45A, POLA2, RPA2, MPG, UBE1, ORC2L, FANCC, BMI1, RECQL, TOP1, N4BP2, PARP3, TOP2B, SETDB2, MNAT1, NCOA6, NAP1L1, ATM, CHD1	10560, 55929, 51742, 4175, 9734, 4781, 5897, 55553, 55729, 1453, 5424, 11284, 5111, 64061, 7319, 56916, 2071, 51455, 675, 257218, 7259, 328, 57680, 1647, 23649, 6118, 4350, 7317, 4999, 2176, 648, 5965, 7150, 55728, 10039, 7155, 83852, 4331, 23054, 4673, 472, 1105
DNA topological change	4.15	3	0.41	ERCC3, TOP1, TOP2B	2071, 7150, 7155
nucleobase, nucleoside, nucleotide and nucleic acid metabolism	4.01	147	110.23	LHX9, SLC19A2, DMAP1, ARID4B, ELYS, CCNT2, MCM6, DDX1, SP110, PPIG, ZNFN1A2, GTF2E1, MSX1, ZNF451, ZNF187, HDAC9, VIK, WHSC1L1, HNF4G, MSC, MTAP, NFIB, ASCC1, JMJD1C, ZNF33A, RAG2, SOX6, ATF7IP, SOX5, C2F, CSNK1D, ACLY, SETBP1, SARS2, HKR1, HNRPL, POLD1, PNKP, UZAF2, KLF1, PRKCBP1, PCNA, C21orf66, NRIP1, PCQAP, SE20-4, UBE2A, SMARCAD1, KIAA1627, TRIM33, POLR3B, PAX8, ERCC3, GLI2, REV1L, FLJ10379, SALF, NR2C2, TRNT1, EXOSC7, HESX1, NSD1, GDA, BRCA2, TCF4, SHPRH, TSPYL1, WDHD1, CTAGE5, RNASE4, SIX1, APEX1, CHD8, BRF1, STAT2, HIF1AN, ZNF265, GADD45A, SLC35A3, PGR, POLA2, NME5, GMDS, MEF2A, RPA2, MPG, ADARB2, ZMYND11, ZFP62, UBE1, P66beta, RRAGC, SFPQ, HNRPR, ZNF496, ZFHX1B, FARSLB, BAZ2B, ORC2L, SFRS12, GNE, FANCC, ARID5B, BMI1, PTHLH, RECQL, MYCPBP, FLJ35867, TCF12, CILP, GTF3C1, MYOCD, STAT3, ZNF540, TOP1, PAX1, JARID1C, N4BP2, HNRPD, NFKB1, PWP1, NR1H4, PARP3, TOP2B, APRIN, SETDB2, BCLAF1, BAZ1A, ANG, MNAT1, SIX4, CSEN, NCOA6, MGC23401, NAP1L1, PCBP2, WDR4, MLL, ATM, PUS3, CHD1, SMAD5, GF11B, TALDO1, SNRPA1, RBM3, CRSP2	56956, 10560, 55929, 51742, 25909, 905, 4175, 1653, 3431, 9360, 22807, 2960, 4487, 26036, 7741, 9734, 79027, 54904, 3174, 9242, 4507, 4781, 51008, 221037, 7581, 5897, 55553, 55729, 6660, 10436, 1453, 47, 26040, 54938, 284459, 3191, 5424, 11284, 11338, 10661, 23613, 5111, 94104, 8204, 51586, 64061, 7319, 56916, 57721, 51592, 55703, 7849, 2071, 2736, 51455, 55133, 286749, 7182, 51095, 23016, 8820, 64324, 9615, 675, 6925, 257218, 7259, 11169, 4253, 6038, 6495, 328, 57680, 2972, 6773, 55662, 9406, 1647, 23443, 5241, 23649, 8382, 2762, 4205, 6118, 4350, 105, 10771, 92379, 7317, 57459, 64121, 6421, 10236, 84838, 9839, 10056, 29994, 4999, 140890, 10020, 2176, 84159, 648, 5744, 5965, 10260, 146050, 6938, 8483, 2975, 93649, 6774, 163255, 7150, 5075, 8242, 55728, 3184, 4790, 11137, 9971, 10039, 7155, 23047, 83852, 9774, 11177, 283, 4331, 51804, 30818, 23054, 196441, 4673, 5094, 10785, 4297, 472, 83480, 1105, 4090, 8328, 6888, 6627, 5935, 9282