Read Me

For "Resolving conflict in eutherian mammal phylogeny using phylogenomics and the multispecies coalescent model", published in PNAS (109): 14942-14947, 2012.

Species list and the specie name abbreviations used in the data file.

|  |  |  |
| --- | --- | --- |
| **Species** | **Common Name** | **Abbreviation** |
| *Vicugna pacos* | Alpaca | Vic |
| *Bos taurus* | Cow | Bos |
| *Sus scrofa* | Pig | Sus |
| *Equus caballus* | Horse | Equ |
| *Canis familiaris* | Dog | Can |
| *Felis catus* | Cat | Fel |
| *Tursiops truncatus* | Dolphin | Tur |
| *Erinaceus europaeus* | Hedgehog | Eri |
| *Pteropus vampyrus* | Megabat | Pte |
| *Myotis lucifugus* | Microbat | Myo |
| Sorex araneus | Shrew | Sor |
| Tupaia belangeri | Tree shrew | Tup |
| *Otolemur garnettii* | Galagos | Oto |
| *Pan troglodytes* | Chimpanzee | Pan |
| *Gorilla gorilla* | Gorilla | Gor |
| *Homo sapiens* | human | Hom |
| *Macaca mulatta* | Macaque | New |
| *Callithrix jacchus* | Marmoset | Cal |
| *Microcebus murinus* | Mouse Lemur | Mic |
| *Pongo pygmaeus* | Orangutan | Pon |
| *Tarsius syrichta(Carlito syrichta)* | Tarsier | Tar |
| *Dipodomys ordii* | Kangaroo rat | Dip |
| *Mus musculus* | Mouse | Mus |
| *Rattus* | Rat | Rat |
| *Spermophilus tridecemlineatus(Ictidomys\_tridecemlineatus)* | Squirrel | Spe |
| *Cavia porcellus* | Guinea Pig | Cav |
| *Ochotona princeps* | Pika | Och |
| *Oryctolagus cuniculus* | Rabbit | Ory |
| *Loxodonta africana* | Elephant | Lox |
| *Procavia capensis* | Hyrax | Pro |
| Echinops telfairi | lesser hedgehog tenrec | Ech |
| *Dasypus novemcinctus* | Armadillos | Das |
| *Choloepus hoffmanni* | Sloth | Cho |
| *Monodelphis domestica* | Opossum | Mon |
| *Macropus eugenii* | Wallaby | Mac |
| *Ornithorhynchus anatinus* | Platypus | Orn |
| *Gallus gallus* | Chicken | Gal |

List of the names of the 447 genes in the data file.

|  |  |
| --- | --- |
| Number | Gene Name |
| 1 | SIPA1L1 |
| 2 | C11orf30 |
| 3 | TXLNB |
| 4 | DGKI |
| 5 | EP300 |
| 6 | APBB2 |
| 7 | POLR1B |
| 8 | SIN3A |
| 9 | SLC18A1 |
| 10 | GNE |
| 11 | DSTYK |
| 12 | PRMT7 |
| 13 | HADHA |
| 14 | ENTPD4 |
| 15 | PYGL |
| 16 | KIF18A |
| 17 | SCIN |
| 18 | TRIM9 |
| 19 | FKBP15 |
| 20 | ABCC8 |
| 21 | MTUS1 |
| 22 | IL12B |
| 23 | CASC4 |
| 24 | ADAMTS5 |
| 25 | EFHB |
| 26 | RAPGEF5 |
| 27 | GORASP2 |
| 28 | CPB2 |
| 29 | PBRM1 |
| 30 | WDR3 |
| 31 | ATP8B1 |
| 32 | SHOC2 |
| 33 | EDN1 |
| 34 | TMC1 |
| 35 | CYP7B1 |
| 36 | EGFLAM |
| 37 | GALNTL6 |
| 38 | CLCA2 |
| 39 | CFI |
| 40 | CENPI |
| 41 | MGEA5 |
| 42 | STAM |
| 43 | NNT |
| 44 | DNAH8 |
| 45 | C6orf192 |
| 46 | TM6SF1 |
| 47 | GOLGA1 |
| 48 | CALCRL |
| 49 | MOCOS |
| 50 | TNRC6B |
| 51 | GLP2R |
| 52 | UBA6 |
| 53 | C12orf63 |
| 54 | BICC1 |
| 55 | MPP7 |
| 56 | ANKRD28 |
| 57 | PRLR |
| 58 | CASR |
| 59 | CHD6 |
| 60 | PRKG1 |
| 61 | TSR1 |
| 62 | MERTK |
| 63 | IL1RAPL1 |
| 64 | ZW10 |
| 65 | LPIN2 |
| 66 | EEF2K |
| 67 | PLCB4 |
| 68 | RNF111 |
| 69 | PTCD3 |
| 70 | SBF2 |
| 71 | SBF2 |
| 72 | TTC39B |
| 73 | STIM2 |
| 74 | TNKS |
| 75 | NR4A2 |
| 76 | PAN3 |
| 77 | MXD1 |
| 78 | IARS2 |
| 79 | PSMD1 |
| 80 | FAM59A |
| 81 | MEGF10 |
| 82 | AP3B1 |
| 83 | SLC35B3 |
| 84 | TDP1 |
| 85 | FARSB |
| 86 | B3GALTL |
| 87 | SUPV3L1 |
| 88 | THSD7A |
| 89 | DOCK3 |
| 90 | RBM6 |
| 91 | AVEN |
| 92 | SLC4A4 |
| 93 | ATRN |
| 94 | VAT1L |
| 95 | TEK |
| 96 | AGBL5 |
| 97 | RSBN1 |
| 98 | TMEM144 |
| 99 | AATF |
| 100 | PEX5L |
| 101 | TINAG |
| 102 | DYNC1I2 |
| 103 | DYNC1I2 |
| 104 | CLYBL |
| 105 | CADPS2 |
| 106 | C20orf72 |
| 107 | CREM |
| 108 | KIAA0100 |
| 109 | TRIM36 |
| 110 | GLG1 |
| 111 | APAF1 |
| 112 | KIAA1279 |
| 113 | NSUN2 |
| 114 | SLC17A8 |
| 115 | HELQ |
| 116 | TAF1A |
| 117 | ADCY8 |
| 118 | ARMC3 |
| 119 | TAOK1 |
| 120 | IL7R |
| 121 | ATM |
| 122 | PLS3 |
| 123 | TP53BP2 |
| 124 | CUGBP1 |
| 125 | PACRGL |
| 126 | ASXL2 |
| 127 | ZEB1 |
| 128 | C20orf74 |
| 129 | MEI1 |
| 130 | LRRC6 |
| 131 | HHIP |
| 132 | MAST4 |
| 133 | PRUNE2 |
| 134 | MELK |
| 135 | COL12A1 |
| 136 | COL12A1 |
| 137 | OSBPL3 |
| 138 | IL12RB2 |
| 139 | ITGA8 |
| 140 | DRP2 |
| 141 | YLPM1 |
| 142 | AGXT2 |
| 143 | GPATCH1 |
| 144 | TRPM3 |
| 145 | DSCAM |
| 146 | NRAP |
| 147 | MYO1B |
| 148 | PDE6C |
| 149 | SYNE1 |
| 150 | SLC5A12 |
| 151 | SF3B3 |
| 152 | ENPP6 |
| 153 | DENND4A |
| 154 | TRPC3 |
| 155 | GPHN |
| 156 | RNF214 |
| 157 | DPYS |
| 158 | SLC13A1 |
| 159 | MTERFD1 |
| 160 | DMXL1 |
| 161 | ATP13A3 |
| 162 | TTC14 |
| 163 | SUPT3H |
| 164 | MCTP2 |
| 165 | LETM2 |
| 166 | C9orf5 |
| 167 | IQCH |
| 168 | E2F7 |
| 169 | PLCE1 |
| 170 | RLF |
| 171 | MAN2A1 |
| 172 | FDXACB1 |
| 173 | FTSJD2 |
| 174 | MYST4 |
| 175 | HSPA12A |
| 176 | NAV2 |
| 177 | ANKRD29 |
| 178 | SLIT2 |
| 179 | PTK2 |
| 180 | KNTC1 |
| 181 | FANCI |
| 182 | TECTB |
| 183 | RHBDD1 |
| 184 | C8A |
| 185 | DPYSL3 |
| 186 | LYST |
| 187 | LYST |
| 188 | BRPF1 |
| 189 | BRPF1 |
| 190 | PRPF8 |
| 191 | TLN2 |
| 192 | ECD |
| 193 | ACSL6 |
| 194 | NR2C1 |
| 195 | DDX1 |
| 196 | APPBP2 |
| 197 | SPG20 |
| 198 | BTAF1 |
| 199 | PIK3R1 |
| 200 | RHOBTB1 |
| 201 | TRPC5 |
| 202 | EIF2AK3 |
| 203 | ALOX5AP |
| 204 | EPS15 |
| 205 | AFF1 |
| 206 | IL6ST |
| 207 | ERCC6 |
| 208 | SLC35B4 |
| 209 | GLS |
| 210 | SART3 |
| 211 | PAK7 |
| 212 | LNX2 |
| 213 | FREM1 |
| 214 | GPR126 |
| 215 | QARS |
| 216 | SOX5 |
| 217 | C3orf15 |
| 218 | ORC1L |
| 219 | SLC25A16 |
| 220 | TAT |
| 221 | LACE1 |
| 222 | MTMR12 |
| 223 | LIFR |
| 224 | ERMP1 |
| 225 | PIBF1 |
| 226 | STAB2 |
| 227 | SEC23A |
| 228 | ARFGEF2 |
| 229 | RNF20 |
| 230 | KIAA0090 |
| 231 | TRAF3 |
| 232 | PITPNC1 |
| 233 | EDC4 |
| 234 | HSPA13 |
| 235 | LRCH1 |
| 236 | SVEP1 |
| 237 | APC |
| 238 | C6orf89 |
| 239 | KIAA0196 |
| 240 | GINS3 |
| 241 | FLT3 |
| 242 | FLT3 |
| 243 | AQR |
| 244 | KIAA0652 |
| 245 | LASS6 |
| 246 | FHOD3 |
| 247 | EPYC |
| 248 | ANKFN1 |
| 249 | CDH20 |
| 250 | ARHGAP17 |
| 251 | ARHGAP17 |
| 252 | LPCAT3 |
| 253 | SETBP1 |
| 254 | AOF1 |
| 255 | PHLPP2 |
| 256 | GRAMD3 |
| 257 | C6orf105 |
| 258 | CSRP2BP |
| 259 | CDC2L6 |
| 260 | ATF7IP |
| 261 | RASSF6 |
| 262 | LAMB1 |
| 263 | CCDC75 |
| 264 | MTIF2 |
| 265 | DHX35 |
| 266 | ARHGAP26 |
| 267 | PDIA3 |
| 268 | SDCCAG8 |
| 269 | GPM6A |
| 270 | L3MBTL3 |
| 271 | GANC |
| 272 | GRHL3 |
| 273 | KIF11 |
| 274 | TYRP1 |
| 275 | HOMER1 |
| 276 | CLINT1 |
| 277 | SMURF1 |
| 278 | HBS1L |
| 279 | ABCA4 |
| 280 | DDHD1 |
| 281 | UBR2 |
| 282 | SLC4A10 |
| 283 | MPDZ |
| 284 | MCM4 |
| 285 | TUBD1 |
| 286 | SFRS8 |
| 287 | NOL4 |
| 288 | PAPPA |
| 289 | SH2D4B |
| 290 | SSH2 |
| 291 | CDC42BPA |
| 292 | MTMR2 |
| 293 | SMYD4 |
| 294 | YEATS2 |
| 295 | IDE |
| 296 | ITK |
| 297 | CTNND2 |
| 298 | MCM8 |
| 299 | GGH |
| 300 | EYA4 |
| 301 | RALGPS2 |
| 302 | SRBD1 |
| 303 | NUP85 |
| 304 | ERBB2IP |
| 305 | KCNJ6 |
| 306 | NEBL |
| 307 | TXNDC11 |
| 308 | ABCA12 |
| 309 | KCNMA1 |
| 310 | WDR59 |
| 311 | NRP1 |
| 312 | RIPK1 |
| 313 | SPIRE1 |
| 314 | RBM17 |
| 315 | NDUFS3 |
| 316 | COL3A1 |
| 317 | SLC26A7 |
| 318 | ACBD6 |
| 319 | UNC13C |
| 320 | PHF3 |
| 321 | SEL1L |
| 322 | DTWD2 |
| 323 | LCA5 |
| 324 | GLT8D4 |
| 325 | YTHDC2 |
| 326 | PDGFRA |
| 327 | SLC1A1 |
| 328 | C10orf134 |
| 329 | SNX25 |
| 330 | NRCAM |
| 331 | SMC5 |
| 332 | PDE4B |
| 333 | SCARB2 |
| 334 | NUBPL |
| 335 | DNTT |
| 336 | KLHL8 |
| 337 | TTPAL |
| 338 | C11orf82 |
| 339 | SERAC1 |
| 340 | ERC1 |
| 341 | DNM1L |
| 342 | ALG14 |
| 343 | R3HDM1 |
| 344 | SPTAN1 |
| 345 | ACPP |
| 346 | PIGA |
| 347 | C14orf101 |
| 348 | OTC |
| 349 | PLAA |
| 350 | ASB3 |
| 351 | PLXDC2 |
| 352 | CD44 |
| 353 | GUCY1B3 |
| 354 | WDR91 |
| 355 | DCLRE1C |
| 356 | BLMH |
| 357 | GPAM |
| 358 | FCHSD2 |
| 359 | NEK11 |
| 360 | AKIRIN2 |
| 361 | CHORDC1 |
| 362 | HABP2 |
| 363 | MAN1A2 |
| 364 | C6orf97 |
| 365 | FYB |
| 366 | XRN2 |
| 367 | TNPO3 |
| 368 | GABRB3 |
| 369 | TTC25 |
| 370 | CLCN3 |
| 371 | QKI |
| 372 | TERF2 |
| 373 | FEZ1 |
| 374 | PRMT10 |
| 375 | GMPR |
| 376 | PET112L |
| 377 | ENTPD1 |
| 378 | C1orf55 |
| 379 | DLSTP |
| 380 | EML4 |
| 381 | FNBP4 |
| 382 | LMO7 |
| 383 | TMIGD1 |
| 384 | C5orf51 |
| 385 | NEDD9 |
| 386 | NEDD9 |
| 387 | TTF2 |
| 388 | MAPK10 |
| 389 | ITFG1 |
| 390 | POSTN |
| 391 | ZNF318 |
| 392 | FNDC3B |
| 393 | GRIN3A |
| 394 | ANKRD42 |
| 395 | AMDHD1 |
| 396 | NCAPG2 |
| 397 | MYOF |
| 398 | GPR155 |
| 399 | NSMAF |
| 400 | ANKMY2 |
| 401 | COG5 |
| 402 | ANXA13 |
| 403 | MYB |
| 404 | RPGRIP1L |
| 405 | ADNP |
| 406 | PPM1D |
| 407 | GBF1 |
| 408 | AHR |
| 409 | ENPP1 |
| 410 | ADPRH |
| 411 | ZDHHC2 |
| 412 | RHOBTB3 |
| 413 | PPFIBP2 |
| 414 | CSMD2 |
| 415 | EYA3 |
| 416 | ALCAM |
| 417 | INSC |
| 418 | VAV3 |
| 419 | SORCS1 |
| 420 | RAB22A |
| 421 | LRIG3 |
| 422 | MTF1 |
| 423 | RBM20 |
| 424 | GAN |
| 425 | CDKL5 |
| 426 | CCDC111 |
| 427 | SLC25A24 |
| 428 | UNC5D |
| 429 | CASP9 |
| 430 | MYOT |
| 431 | VCAN |
| 432 | LSG1 |
| 433 | COPB1 |
| 434 | ZNF507 |
| 435 | CACNB2 |
| 436 | CREBBP |
| 437 | TOMM70A |
| 438 | SNAP91 |
| 439 | C3orf67 |
| 440 | SIM1 |
| 441 | PARD3 |
| 442 | SPHKAP |
| 443 | C1orf58 |
| 444 | PTPRG |
| 445 | C21orf66 |
| 446 | IFIH1 |
| 447 | COL4A4 |