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.

|  |  |  |
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| **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* | Tarsier | Tar |
| *Dipodomys ordii* | Kangaroo rat | Dip |
| *Mus musculus* | Mouse | Mus |
| *Rattus* | Rat | Rat |
| *Spermophilus 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  |