|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Supplementary Table. 176 CpGs sites related to telomere length | | | | | |
| CpG | Chromosome | MapInfo | Gene symbol | Gene Region | Chromosome Region |
| cg01919488 | 2 | 71558589 | ZNF638 | TSS1500 | shore |
| cg10403036 | 2 | 27434719 | C2orf28 | TSS1500 | island |
| cg26362576 | 1 | 145611275 | POLR3C | TSS1500 | island |
| cg08109855 | 7 | 6144399 | USP42 | TSS200 | island |
| cg05445839 | 1 | 27023088 | ARID1A | 1stExon | island |
| cg11331556 | 5 | 32312356 | MTMR12 | Body | island |
| cg22558673 | 1 | 35257858 | GJA4 | TSS1500 | shore |
| cg27338396 | 8 | 26241120 | BNIP3L | Body | shore |
| cg20962211 | 2 | 183580829 | DNAJC10 | TSS200 | island |
| cg18973238 | 1 | 64169293 |  |  | open sea |
| cg17105737 | 19 | 639777 | FGF22 | TSS200 | island |
| cg00290626 | 8 | 132499131 |  |  | open sea |
| cg02774856 | 19 | 19052293 | HOMER3 | TSS1500 | shore |
| cg06707979 | 2 | 25194373 | DNAJC27 | Body | island |
| cg01759437 | 7 | 44925080 | PURB | TSS200 | open sea |
| cg04862324 | 22 | 50900009 | SBF1 | Body | island |
| cg19916067 | 8 | 143389706 | TSNARE1 | Body | open sea |
| cg13997435 | 1 | 153538406 | S100A2 | TSS200 | open sea |
| cg26616780 | 20 | 1546019 | SIRPB1 | 3'UTR | open sea |
| cg04475037 | 12 | 124018492 | RILPL1 | TSS1500 | island |
| cg13990065 | 11 | 73468824 | RAB6A | Body | shelf |
| cg18715236 | 12 | 19557038 |  |  | open sea |
| cg00518623 | 20 | 54933797 | C20orf108 | TSS200 | shore |
| cg17758673 | 4 | 3365342 | RGS12 | Body | island |
| cg02374680 | 20 | 36322378 | CTNNBL1 | TSS200 | island |
| cg21586865 | 7 | 5230329 | WIPI2 | Body | island |
| cg04349727 | 19 | 51457389 | KLK5 | TSS1500 | open sea |
| cg20126088 | 6 | 11093654 | LOC221710 | TSS1500 | island |
| cg25396690 | 2 | 7006004 | CMPK2 | TSS200 | island |
| cg10004574 | 22 | 21400178 | LOC400891 | TSS200 | island |
| cg18156204 | 17 | 71948613 |  |  | island |
| cg21605452 | 3 | 176915282 | TBL1XR1 | TSS1500 | shore |
| cg08148697 | 16 | 2047871 | ZNF598 | 3'UTR | shore |
| cg04841358 | 8 | 10897293 | XKR6 | Body | open sea |
| cg22582875 | 17 | 80545272 | FOXK2 | Body | shore |
| cg05043032 | 1 | 95583073 | TMEM56 | 1stExon | island |
| cg11188483 | 3 | 39542821 | MOBP | 5'UTR | shore |
| cg06677538 | 7 | 100609094 |  |  | island |
| cg16406345 | 16 | 58768254 | GOT2 | TSS200 | island |
| cg00303723 | 19 | 18304398 | MPV17L2 | Body | island |
| cg23731089 | 8 | 141599208 | EIF2C2 | Body | open sea |
| cg15573846 | 11 | 126152723 | TIRAP | TSS1500 | island |
| cg14721618 | 17 | 76356197 | SOCS3 | TSS200 | island |
| cg10767164 | 7 | 102784027 | RPL19P12 | TSS1500 | open sea |
| cg22592140 | 7 | 130132419 | MEST | 5'UTR | island |
| cg08306029 | 10 | 423607 | DIP2C | Body | shore |
| cg26954499 | 11 | 61735309 | FTH1 | TSS200 | island |
| cg16782719 | 12 | 129280334 | SLC15A4 | Body | island |
| cg02804047 | 6 | 32330197 | C6orf10 | Body | open sea |
| cg11082565 | 17 | 883117 | NXN | TSS200 | island |
| cg14458834 | 17 | 46655394 | HOXB4 | 1stExon | island |
| cg07764959 | 11 | 57282648 | SLC43A1 | 5'UTR | island |
| cg24867146 | 1 | 36273870 | EIF2C4 | 5'UTR | island |
| cg06281205 | 2 | 58462331 | FANCL | Body | open sea |
| cg24886176 | 2 | 70142158 | MXD1 | TSS200 | island |
| cg17064051 | 20 | 3713345 | HSPA12B | TSS200 | island |
| cg10840412 | 1 | 235813424 | GNG4 | TSS200 | island |
| cg18711617 | 17 | 49338392 | MBTD1 | TSS1500 | island |
| cg14951038 | 14 | 91975624 | SMEK1 | Body | shore |
| cg04988487 | 15 | 57611637 |  |  | open sea |
| cg05702737 | 2 | 219745297 | WNT10A | 1stExon | island |
| cg01735621 | 6 | 74162051 | C6orf150 | TSS200 | island |
| cg00696023 | 3 | 155588382 | GMPS | 5'UTR | island |
| cg12300725 | 13 | 112983207 |  |  | shore |
| cg15492450 | 6 | 8435478 | SLC35B3 | 5'UTR | island |
| cg06398735 | 10 | 21822968 | MLLT10 | TSS200 | island |
| cg16176654 | 10 | 14646003 | FAM107B | Body | island |
| cg25705936 | 17 | 78795864 | RPTOR | Body | shore |
| cg23402769 | 7 | 16685581 | BZW2 | TSS200 | island |
| cg16615927 | 18 | 12377398 | AFG3L2 | TSS1500 | shore |
| cg00989002 | 16 | 52225569 |  |  | open sea |
| cg02489492 | 12 | 16662646 |  |  | open sea |
| cg22510037 | 12 | 113772128 | SLC24A6 | 5'UTR | shore |
| cg07338552 | 18 | 74062638 |  |  | island |
| cg17511416 | 9 | 15553286 | C9orf93 | 1stExon | island |
| cg02624704 | 1 | 173446429 | PRDX6 | TSS200 | island |
| cg12777225 | 9 | 131534396 | ZER1 | TSS200 | island |
| cg21601585 | 7 | 87849017 | SRI | Body | island |
| cg18440127 | 12 | 108155221 | PRDM4 | TSS1500 | shore |
| cg10254698 | 14 | 93669495 | C14orf142 | 3'UTR | shelf |
| cg11582993 | 1 | 236767997 | HEATR1 | TSS200 | island |
| cg20376123 | 22 | 46760595 | CELSR1 | Body | island |
| cg11407198 | 19 | 5047591 | KDM4B | Body | island |
| cg01137737 | 16 | 19533410 | GDE1 | 1stExon | island |
| cg18864581 | 15 | 66797614 | ZWILCH | 1stExon | open sea |
| cg08446255 | 8 | 26434378 | DPYSL2 | TSS1500 | island |
| cg06624711 | 7 | 150076028 | ZNF775 | TSS1500 | island |
| cg16871527 | 20 | 20693360 | RALGAPA2 | TSS200 | island |
| cg01702338 | 6 | 32812571 | PSMB8 | 5'UTR | shore |
| cg25198579 | 15 | 67358136 | SMAD3 | TSS200 | island |
| cg12752396 | 18 | 55289340 | NARS | TSS200 | island |
| cg23097509 | 1 | 21113554 | HP1BP3 | TSS1500 | island |
| cg00036440 | 16 | 3507875 | NAT15 | 5'UTR | island |
| cg03660010 | 4 | 48342263 | SLAIN2 | TSS1500 | shore |
| cg08249467 | 11 | 2646113 | KCNQ1 | Body | open sea |
| cg18234130 | 8 | 27182889 | PTK2B | 5'UTR | shore |
| cg27087525 | 6 | 17600386 | FAM8A1 | TSS200 | island |
| cg14028598 | 1 | 171714300 |  |  | shelf |
| cg15367021 | 18 | 30050896 | FAM59A | TSS1500 | island |
| cg17825298 | 7 | 151573262 | PRKAG2 | Body | island |
| cg04186249 | 22 | 37006716 | CACNG2 | Body | open sea |
| cg23766360 | 12 | 6193688 | VWF | Body | open sea |
| cg08411536 | 22 | 43506465 | BIK | TSS1500 | shore |
| cg11823214 | 1 | 163291487 | NUF2 | TSS1500 | island |
| cg10499166 | 1 | 23345815 | KDM1A | TSS200 | island |
| cg16219283 | 6 | 31540002 | LTA | TSS200 | open sea |
| cg00119986 | 17 | 37774457 |  |  | island |
| cg06869407 | 7 | 111846526 | DOCK4 | TSS200 | island |
| cg03876174 | 6 | 33378508 | PHF1 | TSS1500 | island |
| cg00542261 | 10 | 71121415 | HK1 | Body | open sea |
| cg22078079 | 3 | 52739121 | GLT8D1 | TSS1500 | shore |
| cg23803801 | 18 | 11877637 | GNAL | Body | shelf |
| cg22934035 | 6 | 31549480 | LTB | Body | shore |
| cg17947364 | 6 | 106056667 |  |  | open sea |
| cg25760338 | 6 | 52860082 | GSTA4 | 5'UTR | shore |
| cg13893634 | 17 | 48229117 | PPP1R9B | TSS1500 | shore |
| cg15693898 | 3 | 183602556 | PARL | 1stExon | island |
| cg14263118 | 20 | 57463787 | GNAS | 3'UTR | island |
| cg04746851 | 11 | 66496148 |  |  | island |
| cg07241917 | 1 | 221069699 |  |  | shore |
| cg17745803 | 6 | 29631321 | MOG | Body | open sea |
| cg06737561 | 10 | 50821518 | CHAT | TSS1500 | island |
| cg24822001 | 3 | 43732329 | ABHD5 | TSS200 | island |
| cg00458754 | 10 | 88427813 | LDB3 | TSS1500 | open sea |
| cg13551243 | 8 | 146052742 | ZNF7 | TSS200 | island |
| cg19001522 | 10 | 54714816 |  |  | open sea |
| cg00309106 | 6 | 31865663 | EHMT2 | TSS200 | shore |
| cg13834453 | 9 | 33167337 | B4GALT1 | 5'UTR | island |
| cg16274098 | 8 | 92053265 | TMEM55A | TSS200 | open sea |
| cg01921368 | 15 | 75746777 | SIN3A | 5'UTR | island |
| cg01503312 | 13 | 20533551 | ZMYM2 | 5'UTR | island |
| cg07120806 | 4 | 1873451 | WHSC1 | 5'UTR | island |
| cg08736516 | 4 | 109541802 | LOC285456 | TSS200 | open sea |
| cg06488135 | 14 | 94641122 | PPP4R4 | Body | island |
| cg05358439 | 10 | 90751218 | ACTA2 | TSS200 | shore |
| cg27394038 | 6 | 36562217 | SFRS3 | 5'UTR | island |
| cg08370718 | 15 | 49913307 | DTWD1 | 1stExon | island |
| cg24650296 | 5 | 639205 | CEP72 | Body | open sea |
| cg25101061 | 5 | 176739547 | MXD3 | TSS1500 | island |
| cg05340255 | 1 | 78470449 | DNAJB4 | TSS200 | open sea |
| cg15034081 | 19 | 38893816 | FAM98C | 1stExon | island |
| cg04454272 | 22 | 31795531 | DRG1 | TSS200 | island |
| cg08509270 | 14 | 101513595 | MIR889 | TSS1500 | open sea |
| cg24728447 | 16 | 47495541 | PHKB | Body | shore |
| cg26289450 | 6 | 32158233 | PBX2 | TSS1500 | open sea |
| cg15160573 | 1 | 28908642 | SNORA16A | TSS1500 | island |
| cg13941682 | 4 | 702545 | PCGF3 | 5'UTR | shelf |
| cg04229842 | 17 | 55038233 | COIL | 1stExon | island |
| cg24203851 | 6 | 111136481 | CDK19 | TSS200 | island |
| cg25407979 | 1 | 204256846 | PLEKHA6 | 5'UTR | open sea |
| cg00239353 | 16 | 3115133 | IL32 | TSS1500 | open sea |
| cg25718732 | 17 | 42276040 | ATXN7L3 | TSS1500 | shore |
| cg12818493 | 21 | 44527599 | U2AF1 | 5'UTR | island |
| cg15091337 | 2 | 75185439 | POLE4 | TSS1500 | shore |
| cg03820205 | 10 | 76970516 | VDAC2 | TSS200 | island |
| cg18720687 | 17 | 855312 | NXN | Body | open sea |
| cg07283098 | 3 | 134514086 | EPHB1 | TSS200 | island |
| cg03421104 | 1 | 5793847 |  |  | shore |
| cg21128553 | 6 | 3163406 |  |  | island |
| cg02101876 | 13 | 40765110 |  |  | open sea |
| cg17323833 | 19 | 14117336 | RFX1 | TSS1500 | island |
| cg12728665 | 13 | 113744906 | MCF2L | Body | shore |
| cg01919885 | 4 | 3365330 | RGS12 | Body | island |
| cg16009381 | 5 | 173043599 | BOD1 | 5'UTR | island |
| cg05945943 | 18 | 60986770 | BCL2 | TSS200 | island |
| cg03657031 | 19 | 54385215 | PRKCG | TSS1500 | shore |
| cg06842800 | 12 | 65003032 | RASSF3 | TSS1500 | shore |
| cg12152384 | 12 | 47164566 | SLC38A4 | Body | open sea |
| cg14298577 | 7 | 100272703 | GNB2 | 5'UTR | island |
| cg08676730 | 17 | 53828263 | PCTP | TSS200 | shore |
| cg08450106 | 19 | 13030084 | SYCE2 | 1stExon | island |
| cg18442830 | 17 | 2317999 | LOC284009 | Body | open sea |
| cg15680020 | 20 | 61560627 | DIDO1 | 5'UTR | island |
| cg18063222 | 8 | 146052715 | ZNF7 | TSS200 | island |
| cg26851727 | 3 | 118959928 | B4GALT4 | TSS200 | island |
| cg07161062 | 8 | 142204334 | DENND3 | 3'UTR | open sea |