|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Primer name** | **GenBank Accession**  **(PrimerBank ID)** | **Primer sequence (5'-3')** | **Amplicon size (bp)** | | |
| **TRPC channels** |  |  |  |  |  |
| TRPC1 outer\*† | NM\_011643 | Forward: CAAGATTTTGGGAAATTTCTGG | 372 | | |
|  |  | Reverse: TTTATCCTCATGATTTGCTAT |  | | |
| TRPC1 inner | NM\_011643 | Forward: TCTGCGAACAGCAAAGCAAT | 191 | | |
|  |  | Reverse: CGTCAGCACAATCACAACCAC |  | | |
| TRPC2 outer | NM\_011644 | Forward: GTGAGTGGCGTACAGAGGAC | 550 | | |
|  |  | Reverse: TTTGGGGATGGCAGGATGTT |  | | |
| TRPC2 inner\*† | NM\_011644 | Forward: GATCCGGTTCATGTTCATCCT | 327 | | |
|  |  | Reverse: GAGCGAGCAAACTTCCACTC |  | | |
| TRPC3 outer | NM\_019510 | Forward: TGCGGGGATGCGTGAC | 454 | | |
|  |  | Reverse: GATGTCAGGCGAGAAGCGT |  | | |
| TRPC3 inner\*‡ | NM\_019510 | Forward: GCCTTCATGTTCGGTGCTC | 195 | | |
|  | (170650610c1) | Reverse: GGTCACCTCCAGATGCTCATT |  | | |
| TRPC4 outer\*† | NM\_016984 | Forward: TCTGCAGATATCTCTGGGAAGGATGC | 415 | | |
|  |  | Reverse: AAGCTTTGTTCGAGCAAATTTCCATTC |  |  | |
| TRPC4 inner | NM\_016984 | Forward: ATCCGGTGCGAGAAACAGAA | 242 | | |
|  |  | Reverse: TCTGCATGGTCGGCAATTAGT |  | | |
| TRPC5 outer | NM\_009428 | Forward: TGGGACGAATGCTGCTTGAT | 554 | | |
|  |  | Reverse: GTGCCTCCTTCGTCTTCCAT |  | | |
| TRPC5 inner\*† | NM\_009428 | Forward: ATCTACTGCCTAGTACTACTGGCT | 340 | | |
|  |  | Reverse: CAGCATGATCGGCAATGAGCTG |  | | |
| TRPC6 outer\*† | NM\_013838 | Forward: AAAGATATCTTCAAATTCATGGTC | 327 | | |
|  |  | Reverse: CACGTCCGCATCATCCTCAATTTC |  | | |
| TRPC6 inner | NM\_013838 | Forward: GGCGCAAAACAGAATGAAGCA | 236 | | |
|  |  | Reverse: TCCGCATCATCCTCAATTTCCT |  | | |
| TRPC7 outer\*† | NM\_012035 | Forward: CGTGCTGTATGGGGTTTATAATG | 693 | | |
|  |  | Reverse: GCTTTGGAATGCTGTTAGAC |  | | |
| TRPC7 inner | NM\_012035 | Forward: ATCTAAGGCCAAACGCTGTGA | 386 | | |
|  |  | Reverse: AAATGTCCTTGCCCTGGTTCA |  | | |
| **TRPV channels** |  |  |  |  |  |
| TRPV1 outer | NM\_001001445 | Forward: GCCCTTGAACCGACTCCTG | 537 | | |
|  |  | Reverse: ACGGCTGTGGAAAATCCAAAC |  | | |
| TRPV1 inner\*† | NM\_001001445 | Forward: GCATCTTCTACTTCAACTTCTTCGTC | 321 | | |
|  |  | Reverse: CCACATACTCCTTGCGATGGC |  | | |
| TRPV2 outer | NM\_011706 | Forward: GCAGTGCTGAGGTGAACAAAG | 459 | | |
|  |  | Reverse: ACCACAGGCTCCTCTTCTCTA |  | | |
| TRPV2 inner\* | NM\_011706 | Forward: GTTTGACCGTGACCGACTCT | 271 | | |
|  |  | Reverse: GCCTCGGTAGAACTCATCGG |  | | |
| TRPV3 outer\*† | NM\_145099 | Forward: CAAGGACTGCCACCACCATC | 298 | | |
|  |  | Reverse: CATCACAGTTGCCAGAGAGG |  | | |
| TRPV3 inner | NM\_145099 | Forward: CCCTCATGGGCAAAAGAACC | 161 | | |
|  |  | Reverse: GATGGGTGGAGAGGTCTTGG |  | | |
| TRPV4 outer | NM\_022017 | Forward: GACGTCCAAACCTGCGTATG | 515 | | |
|  |  | Reverse: GATGTCTCTGAAGGGCGAGT |  | | |
| TRPV4 inner\*† | NM\_022017 | Forward: GAGTCCTCAGTAGTGCCTGG | 249 | | |
|  |  | Reverse: CAACAAGAAGGAGAGCAGTC |  | | |
| TRPV5 outer | NM\_001007572 | Forward: AAGTTGTAGCCACCACAGTGA | 344 | | |
|  |  | Reverse: CAGGGTGTTTCGACGGAGA |  | | |
| TRPV5 inner\*† | NM\_001007572 | Forward: CGTTGGTTCTTACGGGTTGAA | 173 | | |
|  |  | Reverse: GTTTGGAGAACCACAGAGCCTCTA |  | | |
| TRPV6 outer | NM\_022413 | Forward: CAGGAGACGGGACCTCTACA | 465 | | |
|  |  | Reverse: CTCCGAAGTCATGGGCTCAA |  | | |
| TRPV6 inner\*† | NM\_022413 | Forward: AACCAGCCTTCCACC | 318 | | |
|  |  | Reverse: CCTCCATTAGCACCA |  | | |
| **TRPM channels** |  |  |  | | |
| TRPM1 outer\* | NM\_018752 | Forward: CATAGGCACCCACATGCTCTT | 451 | | |
|  |  | Reverse: GGAATCTGGCTTGGTGTCGT |  |  |  |
| TRPM1 inner | NM\_018752 | Forward: CTTCATGTGGGCTGCTCCTCTT | 292 | | |
|  |  | Reverse: GTCTGCCTGCTTGGTGTCCT |  | | |
| TRPM2 outer | NM\_138301 | Forward: TCTTCCGTGGGGTTGTCTATC | 416 | | |
|  |  | Reverse: CTTGGCAGGGATCTTCAGGAC |  | | |
| TRPM2 inner\*† | NM\_138301 | Forward: CAGATCCCAACCTACATTGACG | 216 | | |
|  |  | Reverse: GAAGGTGTAGTTGAACATGGCGA |  | | |
| TRPM3 outer\* | NM\_177341 | Forward: GAAGCCTCTGCCCTAATGGAA | 491 | | |
|  |  | Reverse: GCCACCTCCTTGGAACTCAA |  | | |
| TRPM3 inner | NM\_177341 | Forward: GGTGGAATTTGGAAGGGGTCA | 350 | | |
|  |  | Reverse: AAAAGCGTCTGTTGGGCTGA |  | | |
| TRPM4 outer | NM\_175130 | Forward: AGTCTCGTTACCCGCTCTTG | 571 | | |
|  |  | Reverse: CTTGGGTGGCATCCTCTATCC |  | | |
| TRPM4 inner\*† | NM\_175130 | Forward: CCCTGAGGATGGTGTTGAGT | 177 | | |
|  |  | Reverse: AGGAGCACTGGGATGTCAAT |  | | |
| TRPM5 outer\*† | NM\_020277 | Forward: CAGATACTGAGGATGGCTGG | 360 | | |
|  |  | Reverse: GGATCTTGGTGGATGTGCTA |  | | |
| TRPM5 inner | NM\_020277 | Forward: AACTTCGGAGGGTCTGGGAA | 172 | | |
|  |  | Reverse: CCCGAAGCCACGACTTCATA |  | | |
| TRPM6 outer | NM\_153417 | Forward: GGTCCACATGGCTCAAAGCA | 493 | | |
|  |  | Reverse: AGCTGGATTGGTGTAAACGGT |  | | |
| TRPM6 inner\*† | NM\_153417 | Forward: CCAGGTGCCGGTAATAACA | 220 | | |
|  |  | Reverse: CTCTTGTGGCTGCCTTAGGT |  | | |
| TRPM7 outer | NM\_021450 | Forward: GGGCGCGTCCCTGTG | 485 | | |
|  |  | Reverse: TGCTCCGTGTGCTTTTCCA |  | | |
| TRPM7 inner\*† | NM\_021450 | Forward: CGGAGCTGGTCGCACAATTA | 295 | | |
|  |  | Reverse: CCTGGAAGACATCTGTGAGG |  | | |
| TRPM8 outer | NM\_134252 | Forward: GAGCAGACCAAAGGCTGTACT | 581 | | |
|  |  | Reverse: ACCAGGGCGTAGAGGATCAG |  | | |
| TRPM8 inner\* | NM\_134252 | Forward: TATGAGACCCGAGCAGTGGA | 157 | | |
|  |  | Reverse: CAGGCTGAGCGATGAAATGC |  | | |
|  |  |  |  | | |
| **TRPA channel** |  |  |  | | |
| TRPA1 outer | NM\_177781 | Forward: AGGGAGCCACTGACATCGTT |  | 591 |  |
|  |  | Reverse: CCCCTTCATTCAAAAGCCTCG |  |  |  |
| TRPA1 inner\* | NM\_177781 | Forward: CTGCTTCACAGAGCCTCGTT |  | 315 |  |
|  |  | Reverse: AGGTGTGCATCCGTCATTGT |  | | |
| **TRPP channels** |  |  |  | | |
| TRPP1 outer | NM\_013630 | Forward: GAGCTTGTGTGCCCATCCTT | 575 | | |
| (PKD1) |  | Reverse: CCTCCACCAGACATTCCCAT |  | | |
| TRPP1 inner\*‡ | NM\_013630 | Forward: ATGTGTGGATCGGCTTCTCAT |  | 202 |  |
| (PKD1) | (124487379c3) | Reverse: CGCAGCTCGCAGACATAACTA |  | | |
| TRPP2 outer | NM\_008861 | Forward: AGAAACGGATCCTGCTCCATC | 401 | | |
| (PKD2) |  | Reverse: ACAGGCTGAAACTGCCAAGAG |  | | |
| TRPP2 inner\* | NM\_008861 | Forward: AGCTGAATGGGAGCAGTCAC | 221 | | |
| (PKD2) |  | Reverse: TGGGAACTCCGCCAATAACC |  | | |
| TRPP3 outer | NM\_181422 | Forward: CCTGTGGTGGCAGGTTTCTA | 496 | | |
| (PKD2L1) |  | Reverse: GACATGCTGCTGATGGTTTGG |  | | |
| TRPP3 inner\* | NM\_181422 | Forward: TGTCGGAGCATCAGAGGACT |  | 209 |  |
| (PKD2L1) |  | Reverse: TCGGATGGGGTGTGTAGGAA |  | | |
| **Piezo channels** |  |  |  | | |
| Piezo1 outer\* | NM\_001037298 | Forward: TTCTTCGGGTTGGAGAGGTA | 473 | | |
| (Fam38a) |  | Reverse: TGTCACCATGTGGTTAAGGATG |  | | |
| Piezo1 inner | NM\_001037298 | Forward: ATTGTCAGGTCCCATGGAGA |  | 256 |  |
| (Fam38a) |  | Reverse: CCTATCCAGTAGCAGCTCGCT |  | | |
| Piezo2 outer\_1 | NM\_001039485 | Forward: TATCTTCACAATGAGCGCCCA | 473 | | |
| (Fam38b) |  | Reverse: CAGACAGAAGCTGTTTTATAGGC |  | | |
| Piezo2 outer\_2 | NM\_001039485 | Forward: TCGTCTGGTTTCCTCTGCTC | 550 | | |
| (Fam38b) |  | Reverse: TTTGAATCGCTGGGTGCCT |  | | |
| Piezo2 inner\* | NM\_001039485 | Forward: CGCAATGCAATTTCTGGAGA | 299 | | |
| (Fam38b) |  | Reverse: CTGGCGTGTTTGAACTTTCTGT |  | | |
| **Cell markers** |  |  |  | | |
| GFAP outer | NM\_010277 | Forward: CAAGCACGAAGCTAACGACTATC | 399 | | |
|  |  | Reverse: TTTACCACGATGTTCCTCTTGA |  | | |
| GFAP inner | NM\_010277 | Forward: CACGAACGAGTCCCTAGAGC |  | 234 |  |
|  |  | Reverse: ATGGTGATGCGGTTTTCTTC |  | | |
| MBP outer | NM\_001025251 | Forward: CATCACAGAAGAGACCCTCACA | 615 | | |
|  |  | Reverse: AGGATTCGGGAAGGCTGAG |  | | |
| MBP inner | NM\_001025251 | Forward: CACGGGCATCCTTGACTCCAT | 473 | | |
|  |  | Reverse: GAGATCCAGAGCGGCTGTCT |  | | |
| CD45 outer | NM\_001111316 | Forward: AATGACTCATGTGCTCCAGCTA | 415 | | |
| (PTPRC) |  | Reverse: CAGGCCAAGAGACTAACGTTTT |  | | |
| CD45 inner | NM\_001111316 | Forward: CCACCAGGGACTGACAAGTT | 328 | | |
| (PTPRC) |  | Reverse: TAGGCTTAGGCGTTTCTGGA |  | | |
| **Positive control** |  |  |  | | |
| GAPDH\* | NM\_008084 | Forward: TGATGACATCAAGAAGGTGGTGAAG | 240 | | |
|  |  | Reverse: TCCTTGGAGGCCATGTAGGCCAT |  | | |

**Appendix 1.** Primers used for conventional and single-cell RT-PCR. Conventional PCR primers are indicated by an asterisk (\*). Nested PCR with two pairs of primers (outer and inner) was used for single-cell RT-PCR experiments. Information of some primer sequences for TRP channels was obtained from a previous study [50] and PrimerBank [51], and the primers are indicated with a dagger (†) and a double dagger (‡), respectively. PrimerBank IDs are presented with the cited primer pairs.