|  |  |  |
| --- | --- | --- |
| **Gene** | **Forward Primer Sequence** | **Reverse Primer Sequence** |
| **OCT4**  | AGTGAGAGGCAACCTGGAGA | ACACTCGGACCACATCCTTC |
| **SOX2**  | GCCCTGCAGTACAACTCCAT  | GACTTGACCACCGAACCCAT |
| **NANOG**  | CTGAGATGCCTCACACGGAG  | GTGGGTTGTTTGCCTTTGGG |
| **PAX6**  | GTGAGAGTGGACAGACATCCG  | CTGTTCTGCATGCTGGCTCT |
| **BRACHYURY**  | TTCATAGCGGTGACTGCTTATCA  | CACCCCCATTGGGAGTACC |
| **MESOGENIN**  | CAGGATGAGGACCTTGGCAG  | GGATCTTGGTGAGAGGCTGG |
| **TBX6**  | CCCTACTCGGCTGCATTTCT  | GAGCCCACATCCAGATAGCC |
| **HES7**  | GGAACCCGAAGCTGGAGAAA  | CGGAAACCGGACAAGTAGCA |
| **UNCX**  | GGAGAAGGCGTTCAACGAGA  | GGAACCAGACCTGAACTCGG |
| **TBX18**  | CCACCCCGTGTGTACATTCA  | TGGCCTTGGTCATCCAGTTC |
| **MEOX2**  | CTCTGCAAACCAACTGGCAC  | AAGAGTTGGAGCACAGGACG |
| **PAX3**  | AGACTGGCTCCATACGTCCT  | CATGCCCGGGTTCTCTCTTT |
| **PAX7**  | AACCACATCCGCCACAAGAT  | CTCCTGGTAGCGGCAAAGAA |
| **EN1**  | CAGGAACTCAGCCTCAACGA  | ACTCGCTCTCGTCTTTGTCC |
| **SIM1**  | GAGTGGTGTTCCCAGAAGGG  | ATCCAGGGTCTGGAGCAGAT |
| **LBX1**  | GCGGAGAAGTTACTCGCTGT  | CCTTAAACGTCTTGCTGGCG |
| **TFAP2A**  | CCAAGTCCAACAGCAATGCC  | CGACCCGGAACTGAACAGAA |
| **SOX10**  | CCATCCAGGCCCACTACAAG  | GCTCTGGCCTGAGGGGT |
| **RPS16****(Housekeeping)** | GCTATCCGTCAGTCCATCTCCAA | CCTTCTTGGAAGCCTCATCCAC |

**Supplementary file 1a**

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| **Gene** | **Forward Primer Sequence** | **Reverse Primer Sequence** |
| **OCT4** | GTGTTCAGCCAAAAGACCATCT | GGCCTGCATGAGGGTTTCT |
| **NANOG** | TTTGTGGGCCTGAAGAAAACT | AGGGCTGTCCTGAATAAGCAG |
| **EOMES** | TCCATCTCCCACGGATTCTC | TTCGCTCTGTTGGGGTGAAA |
| **SOX17** | GTGGACCGCACGGAATTTG | GGAGATTCACACCGGAGTCA |
| **PAX6** | AACGATAACATACCAAGCGTGT | GGTCTGCCCGTTCAACATC |
| **SOX2** | TGGACAGTTACGCGCACAT | CGAGTAGGACATGCTGTAGGT |
| **MSX1** | ACACAAGACGAACCGTAAGCC | CACATGGGCCGTGTAGAGTC |
| **IRX3** | CCTGTCCAACGTGCTCTCG | GGCCATACGGGTAGAAGGC |
| **WNT3A** | GTGTTCCACTGGTGCTGCTA | CCCTGCCTTCAGGTAGGAGT |
| **FGF8** | GACCCCTTCGCAAAGCTCAT | CCGTTGCTCTTGGCGATCA |
| **BRACHYURY** | TATGAGCCTCGAATCCACATAGT | CCTCGTTCTGATAAGCAGTCAC |
| **MSGN** | GGCCTGGTAGAGGTGGACTA | ACAGGTGGCAGGTAATTCCG |
| **TBX6** | CATCCACGAGAATTGTACCCG | AGCAATCCAGTTTAGGGGTGT |
| **FOXC1** | GGCGAGCAGAGCTACTACC | TGCGAGTACACGCTCATGG |
| **RALDH2** | GCCAGGAGCTGGTACACTAC | AGAAGCGGTGAACTGCACAT |
| **RIPPLY2** | GCTTTACCAATTCAGGCACCC | CACAGGTCAGATCCTCAATTTCA |
| **FOXC2** | CCTCCTGGTATCTCAACCACA | GAGGGTCGAGTTCTCAATCCC |
| **TCF15** | CCTCCTTCTCCAGGGTCCAG | CAGCTGCTTGAAGGTGAGGG |
| **MEOX1** | TCGGCTCCGCAGATATGAGA | CCCTTCACACGCTTCCACTT |
| **PAX3** | AGACTGGCTCCATACGTCCT | CATGCCCGGGTTCTCTCTTT |
| **PAX1** | AGACGTATGGCGAGGTGAAC | CCGACTGATGTCACAGGGTC |
| **PAX9** | CCCCAATTCCCAGGTCTCAC | AGTCCGTACAGCCAGCTTTC |
| **MAFB** | TCAAGTTCGACGTGAAGAAGG | GTTCATCTGCTGGTAGTTGCT |
| **ZIC3** | GGCGCTCAGTTTCCTAACTAC | CTGCCGCATATAACGGAAGAA |
| **GDF7** | TGATGTCGCTTTACCGGAGC | CTGCCGATTCGTCTTGGGT |
| **TFAP2A** | AGGTCAATCTCCCTACACGAG | GGAGTAAGGATCTTGCGACTGG |
| **ETS1** | GATAGTTGTGATCGCCTCACCC | GTCCTCTGAGTCGAAGCTGTC |
| **PAK3** | CCAGGCTTCGCTCTATCTTCC | TCAAACCCCACATGAATCGTATG |
| **FOXD3** | GCAACTACTGGACCCTGGAC | CTGTAAGCGCCGAAGCTCT |
| **OSR1** | CAAGCCGCGCTTTGATTTTG | TCCGCTCATGGATAAGTAGGTT |
| **PAX2** | TGTCAGCAAAATCCTGGGCAG | GTCGGGTTCTGTCGTTTGTATT |
| **LHX1** | CATGCGCGTCATTCAGGTCT | GAGAAGGGACCATTGGGGAT |
| **RPS16****(Housekeeping)** | GCTATCCGTCAGTCCATCTCCAA | CCTTCTTGGAAGCCTCATCCAC |
| **RPL37A****(Housekeeping)** | GTGGTTCCTGCATGAAGACAGTG | TTCTGATGGCGGACTTTACCG |

**Supplementary file 1b**