

**Supplementary Table 5:** List of primers designed and used for qRT-PCR to amplify pluripotency, germ layer, cardiac lineage, primordial germ cell and housekeeping genes.

Primer	Forward	Reverse	Amplicon	Marker
POU5F1 (OCT4)	GGGAGGATTTTGAGGCTGCT	ACCGAGGAGTACAGCGTAGT	127	Pluripotency
SOX2	ACCAGCTCGCAGACCTACAT	TGGAGTGGGAGGAAGAGGTA	154	Pluripotency
NANOG	GAGTACCCGGGCCTCTATTC	CTGACTGCTCCAGGAATGGT	153	Pluripotency
LIN28a	CGGCATCTGTAAGTGTTCA	CCCTCCATGTGCAGCTTACT	126	Pluripotency
DNMT3b	TGAAGAGTCCATCGCAGTTG	GCTTCCACCAATCACCAGT	127	Pluripotency
CDH1	GGCTGAGTTGGACAGAGAGG	GTATGGGGCCATTGTCATTC	149	Pluripotency
SALL4	TGTGCACGAGCTTTTACCAC	GAGCCATGGTGTCTCGATT	115	Pluripotency
KLF4	CGACTTCTCAAGTGCTTCC	TCGTTGAACTCCTCCGTCTC	146	Pluripotency
CLDN6	CTTCATCGGCAACAGCATCG	CGAGTCGTACACCTTGCACT	106	Endoderm
CXCR4	GGCAGACCTCCTCTTTGTCC	TGGCTTCTGACTGTTGGTGG	196	Endoderm
FABP1	CAATTGGTGTGCCAGATGAG	CCAGTCAAGGTCTCCAGCTC	166	Endoderm
PDGFRA	CCACACGCAGACAGAAGAAA	GATGGCAGAATCATCGTCCT	133	Endoderm
KRT19	CTGATCAGCAGTGTGGAGGA	GCCAGAGGAGAACTGTGAGG	177	Ectoderm
NESTIN	AGTTGCTGGGAGGAGTCAGA	GCATCCTCCACTGCTTTCTC	134	Ectoderm
PAX6	GCAACCTGGCTAGCGAAAAG	TCTGCCCGTTCAACATCCTC	75	Ectoderm
TUBB3	GATGTCTCCACCTTCATCG	CTCGGTGAACTCCATCTCGT	145	Ectoderm
HAND1	GCCACCAGCTATATCGCCTA	GCGCCCTTAATCCTCTTCT	189	Mesoderm
CDH2	GACAATGCCCTCAAGTGTT	ATCAAAGCAAACGGTCCAG	123	Mesoderm
SMA	GAGACCCTGTTCCAGCCATC	ATCTCCTTCTGCATGCGGTC	176	Mesoderm/Cardiac
SNAI2	ACCTCATCCAAGGACCACAG	GTTTGGCCAGACCAGAAAAA	157	Mesoderm
TWIST1	AGCTGAGCAAGATCCAGACC	CAGCTTGCCATCTTGGAGTC	100	Mesoderm
NKX2.5	ATAACGTTACCCCGCCTAT	CTCTGCACTGCGTTCAAGTC	166	Cardiac
GATA4	CCTGCGGCCTCTACATGAAG	TTGGGCTTCCGTTTTCTGGT	88	Cardiac
BMP4	GCAGGGCTTCCACCGAATAA	AGTCGTGTGATGAGGCGC	81	Cardiac/PGC
PRDM1	CAAGAACGCCAACAGGAAAT	GCATCCAGTTGCTCTTCTCC	98	PGC
PRDM14	GCATACTCCGCACACACATC	CCACAGACGCTACAGGAACA	151	PGC
TFAP2c	CACGATCAGACGGTTATTCG	CTCCTGGTTGCCATCTCATT	149	PGC
ACTB	ACTGGGACGACATGGAGAAG	GGGGTGTGAAGGTCTCAA	157	Housekeeping
HPRT1	GACCAGTCAACAGGGGACAT	ACACTTCGAGGGGTCTTTT	194	Housekeeping