

Supplemental Table S1 - Primer Sequences

Human *RIT2* upstream region

Forward for -1290 to +76 bp	5'-GTCAGACACAGTTTTAAGCAC-3'
Forward for -374 to +76 bp	5'-GACTATAAGCAGAAGAAATCC-3'
Reverse for both	5'-GTACGAGGTAAGAACCATCA-3'

Expression vector construction for human POU4 factors and ISL1

POU4F1:

Forward for short-form	5'-ACTGAATTCCACACGATGAACAGCGTGCCGTGCACG-3'
Forward for long-form	5'-ACTGAATTCGCCACGATGATGTCCATGAACAGCAAG-3'
Reverse for both	5'-AGAAAGCTTGAGTAAGTGGCAGAGAATTCATCCGCTT-3'

POU4F2:

Forward for short-form	5'-ACTGAATTCAGCGTAATGTGTGCCTTCTACTTACAA-3'
Forward for long-form	5'-ACTGAATTCGGGAAGATGATGATGATGTCCCTGAAC-3'
Reverse for both	5'-AGAAAGCTTGAAATGCCGGCGGAATATTCATTCTTTT-3'

POU4F3:

Forward	5'-ACTGAATTCGCGAAGATGATGGCCATGAACTCCAAG-3'
Reverse	5'-AGAGGATCCGAGTGGACAGCCGAATACTTCATTTCGTTT-3'

ISL1:

Forward	5'-ACTGAATTCACAGATATGGGAGACATGGGAGATCCA-3'
Reverse	5'-AGAAAGCTTGATGCCTCAATAGGACTGGCTACCATGCT-3'

Human *RIT2* expression analysis

<i>RIT2</i>	Forward (exon 4)	5'-GCAGAATTCACAGCCATGCGG-3'
	Reverse (exon 5)	5'-GAGCTTCTTCCACAGGCTGTC-3'

<i>S16</i>	Forward	5'-CACTGCAAACGGGGAAATGG-3'
	Reverse	5'-TGAGATGGACTGTCGGATGG-3'

RT-qPCR analyses of LCM samples for mouse genes

<i>Rit2</i>	Forward	5'-TGGACACTGCTGGTGAGG-3'
	Reverse	5'-CAGATGATGAAGCCCTCTCC-3'

<i>Pou4f1</i>	Forward	5'-AGGCCTATTTTGCCGTACAA-3'
	Reverse	5'-CGTCTCACACCCTCCTCAGT-3'

<i>Pou4f2</i>	Forward	5'-TCTGGAAGCCTACTTCGCCA-3'
	Reverse	5'-CCGGTTCACAATCTCTCTGA-3'

<i>Gapdh</i>	Forward	5'-TCAACAGCAACTCCCACTCTTCCA-3'
	Reverse	5'-ACCCTGTTGCTGTAGCCGTATTCA-3'