

SUPPLEMENTARY TABLE

Supplementary Table 1. Primers for multiplex (outer) and singleplex (inner) PCR and pyrosequencing of single human and mouse oocytes.

Multiplex assay for single human oocytes				
Target region	Primer	Sequence (5'-3')^a	CpG number	Annealing temp:
Human rDNA upstream control element ^b	Forward outer	GTGTTTTGGGGTTGATTAGAGG		60° C
	Reverse outer	ATCACCRATAAACCAAAACCCC		
	Forward inner	GTGTTTTGGGGTTGATTAGAGG		60° C
	Reverse inner Sequencing	*CATCCCAAAACCCAACCTCTCC GGTTGATTAGAGGGTT	5	
Human rDNA core promoter ^c	Forward outer	GGTAGTTGTYGAGGGAGGGG		60° C
	Reverse outer	AAAAAAACRTCCCAACCTCC		
	Forward inner	GTTTTYGTGTGAGTTAGGTAGAGTTT		60° C
	Reverse inner Sequencing	*AAAAAAACRTCCCAACCTCC GGTTTATGTGGGGGAGAGGTTGT	9	
Human <i>GTL2</i> (paternally imprinted)	Forward outer	GAATTATAGGAATGATGGTGTA		60° C
	Reverse outer	CCAAAATACTAACTACTCCTTAAACA		
	Forward inner	AGGGTTAGGAAGTTTAGTAGGTTA		60° C
	Reverse inner Sequencing	*ACTACTCCTTAAACAAAAAACACATAAT GTAGTAAATTAAGTGTATTAGAGA	5	
Human <i>PEG3</i> (maternally imprinted)	Forward outer	GGTTGTTGATTGGTTAGTATAG		60° C
	Reverse outer	CACTCACCTCACCTCAATAC		
	Forward inner	GGTGTAGAAGTTTGGGTAGTTG		57° C
	Reverse inner Sequencing	*CTCACCTCACCTCAATACTAC TGTTTATTTTGGGTTGGT	3	
Multiplex assay for single mouse oocytes				
Target region	Primer	Sequence (5'-3')^a	CpG number	Annealing temp:
Mouse rDNA spacer promoter ^d	Forward outer	GTGTTTAATTGTGTTTGT		58° C
	Reverse outer	CTCCTATATCACCAACCTAAAAACCT		
	Forward inner	GGAGAAAGTGGTGGGTGGG		60° C
	Reverse inner Sequencing 1 Sequencing 2	*CTCCTATATCACCAACCTAAAAACCT AGTGAGTGAATGTGG ATTGGTTTGTATGGTTGA	4 3	
Mouse rDNA core promoter ^d	Forward outer	GGAGGAAAGTGATAGGTTATAGAGAAT		58° C
	Reverse outer	TCCAAAAACCTCTCTATCCC		
	Forward inner	TTGGGGAGGTGGTTAAAAATGA		60° C
	Reverse inner Sequencing 1 Sequencing 2	*CCTCCAAAAACCTCTCTAT GAGGTGGTTTAAAAATGAT GGATTTTAAAGGAATAATTGGT	2 3	
Mouse 18S rDNA	Forward outer	TTAATTTTTTAGAGGGATAAGTGG		58° C
	Reverse outer	AAAACCTCACTAAACCATC		

	Forward inner	AGGTTTGTGATGTTTTAGATGT		60°C
	Reverse inner	*AAAACCTCACTAAACCATC		
	Sequencing 1	TTTGTGATGTTTTAGATGTT	4	
	Sequencing 2	ATTAAGTTTTTGTGTTTTGTATATA	4	
	Forward outer	TGGAGTAGAAGGGTAAAAGTT		58°C
	Reverse outer	CAACCAAACACATACACCAAATATCT		
Mouse 28S rDNA	Forward inner	GGTTTTAAGTAGGAGGTGTTAGAAAAG		60°C
	Reverse inner	*CAACCAAACACATACACCAAATATCT		
	Sequencing 1	GGATAATTGGTTTGTGG	7	
	Sequencing 2	GTTGGATTGTTTATTATTAATAGG	3	

^aPrimers indicated by a star are biotinylated at the 5' end.

^bPrimers adopted from: Raval A, Sridhar KJ, Patel S, Turnbull BB, Greenberg PL, Mitchell BS. Reduced rRNA expression and increased rDNA promoter methylation in CD34+ cells of patients with myelodysplastic syndromes. *Blood*. 2012;120:4812-8.

^cPrimers adopted from: Teschler S, Gotthardt J, Dammann G, Dammann RH. Aberrant DNA methylation of rDNA and PRIMA1 in borderline personality disorder. *Int J Mol Sci*. 2016;17:E67.

^dPrimers adopted from: Shiao YH, Leighty RM, Wang C, Ge X, Crawford EB, Spurrier JM, McCann SD, Fields JR, Fornwald L, Riffle L, Driver C, Kasprzak KS, Quiñones OA, et al. Ontogeny-driven rDNA rearrangement, methylation, and transcription, and paternal influence. *PLoS One*. 2012;6:e22266.