

Supplemental Table 1. Roche Universal Probe Library primer sequences used in quantitative RT-PCR for markers of adipocyte differentiation, function, and thermogenesis in human fat cells and murine adipose tissue

Gene	Species	Accession#	L primer	R primer	UPL probe#
PPARG2	mouse	NM_011146.3	gaaagacaacggacaaatcacc	gggggtgatatgttgaacttg	7
ADIPOQ	mouse	NM_009605.4	ggagagaaaggagatgcaggt	cttctgccaggggttc	17
FABP4	mouse	NM_024406.2	gggatgaaagtcgaccacaa	tggaagtcacgccttcata	31
DIO2	mouse	NM_010050.2	ctgcgctgtctggaac	ggagcatctcaccagttt	69
MEF2C	mouse	NM_001170537.1	tgatcagcaggcaagattg	ggatgtaactggcatctcaa	10
PPARGC1A	mouse	NM_008904.2	gaaagggccaaacagagaga	gtaaatcacacggcgctctt	29
UBE2I	mouse	NM_011665.3	gggttcagggtggaactaagg	ggacagctacaagccaaaag	69
TBP	mouse	NM_013684.3	cggtcgcgtcattttctc	gggttatctcacaccatga	107
CIDEA	mouse	NM_007702.2	aaaccatgaccgaagtagcc	aggccagttgtgatgactaagac	66
ADIPOQ	human	NM_004797.2	ggtgagaagggtgagaaagga	ttcaccgatgtctcccttag	85
NRIP1	human	NM_003489.3	tcaggactcattatittaacatttg	tccctgtcctcctcagta	76
ATG5	human	NM_004849.2	caactgtttcacgctatcagg	cactttgcagttaccaacgtca	38
UBE2I	human	NM_003345.4	acctcatgaactgggagtg	tcatcttgaaaagcatccgta	12
PRDM16	human	NM_022114.2	tacactgtgcaggcaggcta	gtgtggagaggagtgtctcg	56
TBP	human	NM_003194.4	ccatgactcccatgacc	ttacaaccaagattcactgtgg	51
18S	human		ctcaacacgggaaacctcac	cgctccaccaactaagaacg	77

Supplemental Table 2. Taqman® assays used in quantitative RT-PCR for markers of beige adipocytes and miR-30a-5p

Gene	Species	Taqman® Assay
PPARG	human	Hs01115513_m1
FABP4	human	Hs01086177_m1
PPARGC1A	human	Hs01016719_m1
UCP1	human	Hs00222453_m1
CIDEA	human	Hs00154455_m1
BECN1	human	Hs00186838_m1
TP53	human	Hs00159357_m1
MIR-30A-5P	human	000417

Supplemental Table 3. Primers used in ChIP assays for PPAR γ binding near the *UCP1* and *CIDEA* coding regions. A commonly used Cyclin D1 intronic region was used as negative control.

Gene	L primer	R primer
UCP1 enhancer	CACAAAGAAGAAGCAGAGAGGT	TTGCTGCCACTCCTTTGCTA
CIDEA intron 1	GTGAGAGTGTGCCCGAATTC	ACGCAGGGTTCTCAGTTACA
Cyclin D1 intron 4	ACAGCCAGAAGCTCCAAAAA	TGCCACACACCAGTGACTTT