

Supplementary Table 1 Genotyping protocols for TCF7L2 rs7903146, KCNJ11 rs5219 and PPAR γ rs1801282

SOP LightCycler LC480					
Method		TCF7L2 rs7903146 [TCF4]			TIB-Produkt Nr.
Primer					
forward	TCF4 S	GGT GAC AAA TTC ATG GGC TTT CT			779752
reverse	TCF4 A	CGT CTG AAA ACT AAG GGT GAC TCA TA			779753
Probes					
Sensor	Sensor C	LC640-CTT TTT AGA TAC TAT ATA ATT TAA TTG CCG-PH			779757
Anchor	Anchor TCF4	GCT GTT ATT TAC TGA ACA ATT AGA GAG CTA AGC-FL			779754
PCR Mix					
Component	final Conc.	1x	100x		
5x Genotyping Master (Roche)	0,5x	1 μ l	100 μ l		
MgCl ₂ (25mM)	3 mM	0,6 μ l	60 μ l		
Primer f (10 μ M)	1,25 pmol	0,125 μ l	12,5 μ l		
Primer A (10 μ M)	5 pmol	0,5 μ l	50 μ l		
Sensor (3 μ M)	1,5 pmol	0,5 μ l	50 μ l		
Anchor (3 μ M)	1,5 pmol	0,5 μ l	50 μ l		
H ₂ O		3,225 μ l	322,5 μ l		
Template DNA	~ 30 ng/ μ l	1 μ l			
total volume/well		10 μl			
Setup					
Detection Format	Block Type		Reaction Volume		
Mono Color HybProbe	96		10		
Program					
Program Name	Cycles		Analysis Mode		
Pre-Incubation	1		None		
Amplification	40		Quantification		
Melting Curve	1		Melting Curves		
Cooling	1		None		
Temperature Targets					
Target (°C)	Acquisition Mode	Hold (hh:mm:ss)	Ramp Rate (°C/s)	Acquisitions (per °C)	
Pre-Incubation					
95	None	00:10:00	4.4	-	
Amplification					
95	None	00:00:05	4.4	-	
60	Single	00:00:20	1.5	-	
72	None	00:00:10	4.4	-	
Melting Curve					
95	None	00:00:30	4.4	-	
60	None	00:00:30	1.5	-	
53	None	00:00:30	1.5	-	
45	None	00:01:00	1.5	-	
70	Continuous	-	-	3	
Cooling					
40	None	00:00:30	2.2	-	

SOP LightCycler LC480

SOP LightCycler LC480					
Method	KCNJ11 rs5219				TIB-Produkt Nr.
Primer					
forward	KCNJ f	GGG GTC ACC GGA GCC AT			1141215
reverse	KCNJ A	TGT GGG CCA CGT TGC A			1141217
Probes					
Sensor	Sensor [A]	AGG ACC CTG CCA AGC CCA—FL			1141219
Anchor	Anchor	LC640—TAC CGT GCC CGC CAG CGG AG—PH			1141220
PCR Mix					
Component	final Conc.	1x	100x		
5x Genotyping Master (Roche)	0,5x	1 µl	100 µl		
MgCl ₂ (25mM)	3 mM	0,6 µl	60 µl		
Primer f (10µM)	1,25 pmol	0,125 µl	12,5 µl		
Primer A (10µM)	5 pmol	0,5 µl	50 µl		
Sensor (3µM)	1,5 pmol	0,5 µl	50 µl		
Anchor (3µM)	1,5 pmol	0,5 µl	50 µl		
H ₂ O		3,225 µl	322,5 µl		
Template DNA	~ 30 ng/µl	1 µl			
total volume/well		10 µl			
Setup					
Detection Format	Block Type		Reaction Volume		
Mono Color HybProbe	96		10		
Program					
Program Name	Cycles		Analysis Mode		
Pre-Incubation	1		None		
Amplification	40		Quantification		
Melting Curve	1		Melting Curves		
Cooling	1		None		
Temperature Targets					
Target (°C)	Acquisition Mode	Hold (hh:mm:ss)	Ramp Rate (°C/s)	Acquisitions (per °C)	
Pre-Incubation					
95	None	00:10:00	4.4	-	
Amplification					
95	None	00:00:05	4.4	-	} 40x
58	Single	00:00:10	1.5	-	
72	None	00:00:15	4.4	-	
Melting Curve					
95	None	00:00:30	4.4	-	
66	None	00:00:30	1.5	-	
57	None	00:00:30	1.5	-	
45	None	00:01:00	1.5	-	
75	Continuous	-	-	3	
Cooling					
40	None	00:00:30	2.2	-	

SOP LightCycler LC480

Method		hu PPARG rs1801282			TIB-Produkt Nr.
Primer					
forward	PPARGex1 S	ATT TGG AAA CTG ATG TCT TGA CTC A			779750
reverse	PPARGin1 A	CAA TAG CCG TAT CTG GAA GGA AC			779751
Probes					
Sensor	Sensor [G]	CTC CTA TTG ACG CAG AAA GCG-FL			779755
Anchor	PPARG Anc	LC640-TCC TTC ACT GAT ACA CTG TCT GCA AAC ATA TC-PH			779756
PCR Mix					
Component	final Conc.	1x	100x		
5x Genotyping Master (Roche)	0,5x	1 µl	100 µl		
MgCl ₂ (25mM)	3 mM	0,6 µl	60 µl		
Primer S (10µM)	1,25 pmol	0,125 µl	12,5 µl		
Primer A (10µM)	5 pmol	0,5 µl	50 µl		
Sensor (3µM)	1,5 pmol	0,5 µl	50 µl		
Anchor (3µM)	1,5 pmol	0,5 µl	50 µl		
H ₂ O		3,225 µl	322,5 µl		
Template DNA	~ 30 ng/µl	1 µl			
total volume/well		10 µl			
Setup					
Detection Format	Block Type		Reaction Volume		
Mono Color HybProbe	96		10		
Program					
Program Name	Cycles		Analysis Mode		
Pre-Incubation	1		None		
Amplification	40		Quantification		
Melting Curve	1		Melting Curves		
Cooling	1		None		
Temperature Targets					
Target (°C)	Acquisition Mode	Hold (hh:mm:ss)	Ramp Rate (°C/s)	Acquisitions (per °C)	
Pre-Incubation					
95	None	00:10:00	4.4	-	
Amplification					
95	None	00:00:05	4.4	-	
58	Single	00:00:15	1.5	-	
72	None	00:00:12	4.4	-	
Melting Curve					
95	None	00:00:30	4.4	-	
62	None	00:00:30	1.5	-	
54	None	00:00:30	1.5	-	
48	None	00:01:00	1.5	-	
75	Continuous	-	-	3	
Cooling					
40	None	00:00:30	2.2	-	

} 40x