

Assay	Oligo type	Oligo Sequence
TMEFF2	Forward Primer - 10 uM	aaaaaaaaaaaaactcctctacatac
	Reverse Primer - 10 uM	ggttattggttggttaataaatg
	LC Probe - 10 uM	tttttttccggacgtcgtt-fluo
	LC Probe - 10 uM	red640-tcggtcgatgtttcggtaa-pho
	Blocker - 100 uM	acatacaccacaaataaattacaaaaacatcaaccaa-pho

assay conditions:

component	stock	final conc.
water		
MgCl ₂	25mM	3.5 mM
Primer mix	3µM (each)	0.3 µM (each)
Blocker	100µM	4 µM
detect. probes mix	5µM (each)	0.15 µM (each)
1a+1b reagent Fa	10x	1 x
DNA	10µl DNA	
sum		

	Temp °C	Time	
Activation		95 10 min	
Cycling (50x)		95 10 sec	detection
		56 30 sec	
		72 10 sec	
cool		40 30 sec	

Genomic sequence:

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ctattagtgtccacctgggaggtgcggtcagatgtttggaaggt
cagattggtcgggacaagtggctgagagaaagagaaaggctcc
tctgcatacggcggggtgggtgccgggagcatcggccgggca
gcggcgtccgggaagggagagcgggtccattgtggcccag
gcagtgaccctgcgttcctactcgggtctttgccggatggccgggga
cctggggcgacgagagaaggtctaactcggcaggagtctctggct
ctgcgcgtttcttattctctccagcgggaagggcaaacggcatag
cgggacccgccttc

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Assay	Oligo type	Oligo Sequence
NGFR	Forward Primer - 10 uM	tgagagagagagggtgaaa
	Reverse Primer - 10 uM	tctaaataacaaaatacctccatt
	LC Probe - 10 uM	CGaccCGccaacCGac-fluo
	LC Probe - 10 uM	LCred640-CGcCGaaaCGCGctc-p
	Blocker - 100 uM	ccattaccaacacaaccaccaaccaa-p

assay conditions:

component	stock	final conc.
MgCl2	25mM	3.5 mM
Primer mix	3µM (each)	0.3 µM (each)
Blocker	100µM	4 µM
detect. probes mix	5µM (each)	0.15 µM (each)
1a+1b reagent FastStart	10x	1 x
DNA	10µl DNA	
sum		
	Temp °C	Time
Activation		95 10 min
Cycling (50x)		95 10 sec
		56 30 sec
		72 10 sec
cool		40 30 sec

detection

Genomic sequence:

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ccctgcggtccccctccgctcggcgcggtgctcggt
ctgggatggctgtgcgcggtccgagtttctcctggccgcg
tgagagagagagggtgaaaccagagcgcgtcccggcg
ggtcggctggcggccgcgccgtaatggaggcacttgtc
attcagacgtctgtaaccagagcccggtggctaatgc
gcctaatagggatggaacgagggcagcaaatggcgctgc
gtgagcggccggctgagctgggtggatggtggatggga
ggcagctccgggggacggcccctaccgcactgttcca
gcc

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Assay	Oligo type	Oligo Sequence
SIX6	Forward Primer	tcctatcacaaaattcc
	Reverse Primer	gttttgttgatagattg
	Forward Blocker 3	attccaacaacactacaaacaaaaacaacaac
	LC Red Probe	tatTTTTGGCGTgTcGtCGTtttc
	LC Fluoroscien Probe	cgggttggtggcgacggtt

MgCl2	25mM	3.50	mM
Primer mix	10µM (each)	0.30	µM (each)
Blocker 3	100µM	4.00	µM
LC probes mix	10µM (each)	0.15	µM (each)
FastStart mix: 1a+1b	10x	1.00	x

	Temp °C	Time	
Activation	95	10 min	
Cycling (50x)	95	10 sec	
	56	30 sec	detection
	72	10 sec	
Cool	40	30 sec	

Genomic sequence:

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ccgtgtcccttctccccgtagactccagcagcaggtcctgtcacagggt
tccgggcgggcactacgggcggagggcgacggcacgccagagggtgc
tggcgctcgccaccagcccggccgagctctatccagcaaggcggcca
cttcagccatctccatcacgtccagcgacagcgagtgcgacatctgagtt
gccatccaggatgctcagaagca

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Assay	Oligo type	Oligo Sequence
EYA4	Primer:	
	Forward	gagtgagagaatTTTTAAATTT
	Reverse	tcttctaaaacaaaaacacc
	Blocker:	Caccactacaatccaacaacccaaa-pho
	LC probe	Ggacgtcgagcgttggtat-fluo
	LC probe	Red640-aggacgcgtagttggacggt-pho

component	stock	final conc.
water		
MgCl ₂	25mM	3.5 mM
Primer mix	3µM (each)	0.3 µM (each)
Blocker	100µM	4 µM
detect. probes mix	5µM (each)	0.15 µM (each)
1a+1b reagent FastSt	10x	1 x
DNA	10µl DNA	

LightCycler program:

activation:	95°C	10min	
55 cycles:	95°C	10 sec	(20°C/s)
	56°C	30 sec	(20°C/s) detection
	72°C	10 sec	(20°C/s)
melting curve:	95°C	10sec	20
	40°C	10sec	20
	70°C	0sec	0.1
cooling:	40°C	5 sec	

Genomic sequence:

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acgaggtgagtgaccccttctccaacccccgcccagggt
cccggggagcctgagttgagagaaccccaacttccgg
gaaagtgcgcgaggtccgcccgggacgccgagcgtgg
gtactgaggacgcgcagctggacggtgctggcgcctgcg
tccccggggcgcttgaggccgggtgccccacgcctgag
ggccgggcccgtcggaccgcagcgtgctctgcctag
aagacgtcccaagcccaagggtccctccgagcctgcctg
tccttccggggtcggcgc

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Assay	Oligo type	Oligo Sequence
FOXL2	Primer - 10 uM	ccaaaacctaactacaac
	Primer - 10 uM	ggaaatttgaggggtaa
	LC Probe - 10 uM	GTtAATTGCGGGCGAtCGA-FL
	LC Probe - 10 uM	LCred640-CGtCGttAGCGGGTGGG-PH
	Blocker - 100 uM	tacaacaccaccaacaaacccaaaaacacaa-ph

component	stock	final conc.
water		
MgCl2	25mM	3.00 mM
Primer mix	10µM (each)	0.30 µM (each)
Blocker	100µM	4.00 µM
detect. probes	10µM (each)	0.15 µM (each)
FastStart mix:		
1a+1b	10x	1.00 x
DNA	12.5µl DNA	
sum		

LightCycler program

activation:	95°C	10min
50 cycles:	95°C	10 sec
	58°C	30 sec
	72°C	10 sec
cooling:	40°C	30 sec

Genomic sequence:

tattattactaaggacaaccgggcaggctgaggtccaacgtggatgatcc
gagttggcctcgccgggctctgcagccactgcctgtgcgctcagcac
ctctggggcgatcagggcccctgcgtccgcccgcccgccgagtcg
agagcaccctgtgccagactggccgactcattctccccgaattttgtag
agctggcaaggggacttagctcgcccccaagacctgggcttcagcgc
cgccaacaggccgggacacgaggcgctccaggccgggtcttcccg
gctgctggcccctctgctccccaccgctggcgccctcggtcgccgc
aattgaccaaccgcttcc

Assay	Oligo type	Oligo Sequence
ALX4	forward	gagaggtttattaaggtagg
	reverse	ctactaccaaaaataaaaaattattaac
	LC probe	gtttaggggtttgtagagaagtcga-fluo
	Lc probe	red640-tcggataaacgcgctcg-pho
	Blocker	aaaattattaacatccaacacattatccaaactcaaa

assay conditions:

component	stock	final conc.
water		
MgCl ₂	25mM	3.5 mM
Primer mix	3µM (each)	0.3 µM (each)
Blocker	100µM	4 µM
detect. probes mix	5µM (each)	0.15 µM (each)
1a+1b reagent Fas	10x	1 x
DNA	10µl DNA	
sum		

LightCycler program:

activation:	95°C	10min	
55 cycles:	95°C	10 sec	(20°C/s)
	56°C	30 sec	(20°C/s)
	72°C	10 sec	(20°C/s)
melting curve:	95°C	10sec	20
	40°C	10sec	20
	70°C	0sec	0.1
cooling:	40°C	5 sec	

Genomic sequence:

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taccctcggggcgagaggctcaccaaggcagggcgcccccc
ccatgaatcatccaaggcctctgagccgctcggggcaa
ctatccccctctctctggcctcaggcaccagtcagggtctg
cagagaagcccgaagccggacaaacgcgacgtcaaca
acctctcatccctggcagcagcaaaggccaatatattcattcttatt
tcagtttgccacaaaacaaagctgcgctgagggcagga
aggcctgagaccgagaagaaggacgtcccgagaaagtc
gccagctgatcttagaaaccagatcctcc
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Assay	Oligo type	Oligo Sequence
SEPT9	Forward Primer - 10 uM	gtagtagttagttagtatttttt
	Reverse Primer - 10 uM	cccaccaaccatcatat
	LC Probe - 10 uM	gttcgaaatgattttatttagttgc-FL
	LC Probe - 10 uM	LCred640-cgttgatcgcggggttc-PH
	Blocker - 100 uM	catcatatcaaaccaccacaatcaacacacaac-INV (inverted 3'end)

component	stock	final conc.
water		
MgCl ₂	25mM	3.50 mM
Primer mix	10µM (each)	0.30 µM (each)
Blocker	100µM	4.00 µM
detect. probes mix	10µM (each)	0.15 µM (each)
FastStart mix: 1a+1b	10x	1.00 x
DNA	12.5µl DNA	

LightCycler program: SEPT9 HM

activation:	95°C	10min
50 cycles:	95°C	10 sec
	56°C	30 sec detection
	72°C	10 sec
cool	40	30 sec

Genomic sequence:

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tcctgccgctgccctccgcgacccgctgcc
caccagccatcatgtcggaccccggtcaac
gcgcagctggatgggatcattcggacttcgaa
gggggtgctgggctggctgctcggccgcgg
acgtgctggagaggaccctgcgggtgggcctg
gc

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Epi ID	Oligo type	Oligo Sequence
CFF	forward primer - 10 uM	TAAGAGTAATAATGGATGGATGATG
	reverse primer - 10 uM	CCTCCCATCTCCCTTCC
	taq probe	6FAM-ATGGATGAAGAAAGAAAGGATGAGT-BHQ-1

	Temp °C	Time	
Activation		95 10 min	
Cycling (45x)		95 15 sec	
		58 60 sec	detection

Epi ID	Oligo type	Oligo Sequence
GSTP1-bis DNA	Forward Primer - 10 uM	GGAGTGGAGGAAATTGAGAT
	Reverse Primer - 10 uM	CCACACAACAAATACTCAAAAC
	Taq Probe - 10 uM	6FAM-TGGGTGTTTGTAAATTTTGTGTTAGGTT-BHQ-1

Cycling conditions:

	Temp °C	Time
Activation		95 10 min
Cycling (45x)		95 15 sec
		60 45 sec detection

C3 Master Mix- LC w/taq probe

component	stock	final conc.
water		
MgCl ₂	25 mM	3.000 mM
Primer mix	10 μM (each)	0.625 μM (each)
Taqman Detecti	10 μM (each)	0.300 μM (each)
Hyb probe		
Master Mix	10 x	1.00 x
DNA	12.5 μl DNA	
sum		