

PCR Protocol

Modified by Anna Heger

Chr 10 (MADM)

Purification of tail samples with DirectPCR® Lysis Reagent Tail from Peqlab
Phire Hot-Start II DNA Polymerase

Mastermix for 20 µl

13,65 µl H₂O

4 µl Phire Hot-Start II

0,5 µl dNTPs

0,6 µl Primermix M10 (10µM)

0,25 µl Phire Hot-Start II DNA Polymerase

19 µl Lysis + 1 µl DNA

Primer Sequences 5' – 3'

Chr 10 for CCG GCC TAG TCT CAC AAG AG

Chr 10 rev AAG GGA GGA GCT GGA GAG TC

MADM for CCT CCC ACA ACG AGG ACT AC (new primer for MADM cassette)

Results

WT = 215bp

HOM = 607bp

Cycling

98°C 30 sec

98°C 5 sec

62°C 5 sec 34x

72°C 15 sec

72°C 1 min

16°C forever

Gel Elektrophoresis

2,5% Agarose, 1x TAE, 3µl Syber Safe

Run: 110 Volt, 30min

GT

Purification of tail samples with DirectPCR® Lysis Reagent Tail from Peqlab
Phire Hot-Start II DNA Polymerase

Mastermix for 20 µl

13,25 µl H₂O

4 µl Phire Hot-Start II

0,5 µl dNTPs

0,6 µl Primermix GT (10µM)

0,4 µl Primermix Internal Control (10µM)

0,25 µl Phire Hot-Start II DNA Polymerase

19 µl Lysis + 1 µl DNA

Primer Sequences 5' – 3'

294 CCA AGC TGA AGG TGA CCA AG

295 TCT TCT TCT GCA TTA CGG GG

oIMR8744 positive internal control CAA ATG TTG CTT GTC TGG TG

oIMR8745 positive internal control GTC AGT CGA GTG CAC AGT TT

Results

WT control = 200bp

GT = 279bp

(This assay will NOT distinguish hemizygous from homozygous animals)

Cycling

98°C 30 sec

98°C 5 sec

60°C 5 sec 34x

72°C 15 sec

72°C 1 min

16°C forever

Gel Elektrophoresis

3% Agarose, 1x TAE, 3µl Syber Safe

Run: 110 Volt, 30min