

## PCR Protocol

Modified by Anna Heger, *Preclinical Facility*

### **Chr 4 (MADM)**

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

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#### **Mastermix for 20 µl**

13,65 µl H<sub>2</sub>O

4 µl Phire Hot-Start II

0,5 µl dNTPs

0,6 µl Primermix M4 (10µM)

0,25 µl Phire Hot-Start II DNA Polymerase

19 µl Lysis + 1 µl DNA

#### **Primer Sequences 5' – 3'**

Chr 4 for      GTA CTT GCT GTG TGT CCA GAC C

Chr 4 rev     ATT GAA CCC AGG TCC TTT GC

177           TCA ATG GGC GGG GGT CGT T (MADM rev)

#### **Results**

WT = 571bp

HOM = 277bp

#### **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

**TG**

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

**Mastermix for 20 µl**

13,25 µl H<sub>2</sub>O

4 µl Phire Hot-Start II

0,5 µl dNTPs

0,6 µl Primermix TG (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'**

159            GGA CTG GGT GCT CAG GTA GTG GTT GTC G

162            GGT ACG TCC AGG AGC GCA CCA TCT TCT TCA AGG

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

TG = 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