

## PCR Protocol

Modified by Anna Heger, *Preclinical Facility*

### **Chr 19 (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 M19 (10µM)

0,25 µl Phire Hot-Start II DNA Polymerase

19 µl Lysis + 1 µl DNA

#### **Primer Sequences 5' – 3'**

Chr 19 for GGG GAA ACC CCT ATG CTG AG

Chr 19 rev GCC AGA AAG CCA AGA ACA AG

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

#### **Results**

WT = 444bp

HOM = 257bp

#### **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**

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

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**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