R: CAGTTACCAATCAACACATCAC for 30 seconds, 72°C for 30 seconds, 1 cycle: 72°C for 5 minutes Autosomal myogenin* 250 bp F: TTACGTCCATCGTGGACAGCAT R: TGGGCTGGGTGTTAGTCTTAT

PCR amplification cycle

1 cycle: 95°C for 2 minutes, 34 cycles: 96°C for 10 seconds, 60°C

1 cycle: 95°C for 2 minutes, 34 cycles: 96°C for 10 seconds, 60°C

1 cycle: 95°C for 2 minutes, 34 cycles: 96°C for 30 seconds, 57°C

for 30 seconds, 72°C for 30 seconds, 1 cycle: 72°C for 10 minutes 1 cycle: 94°C for 3 minutes, 39 cycles: 94°C for 30 seconds, 62°C

for 30 seconds, 72°C for 45 seconds, 1 cycle: 72°C for 10 minutes

for 30 seconds, 72°C for 30 seconds, 1 cycle: 72°C for 5 minutes

Table S1. Primers used to identify genotypes

Primers (5' to 3' direction)

F: CTGGAGCTCTACAGTGATGA

F: CTCAGTGTGGAATTCATCTGC

R: GAGGGCATGGTCAGTTGAAC

F: TGGTGAGCATACACCATACC

R: TTGCTGTCTTTGTGCTAGCC

F: TGATGAGGTTCGCAAGAACC

R: CCATGAGTGAACGAACCTGG

Target

Sxr†

Sry¹²⁹ transgene

Tg93 (Zp3-Cre)

YMT2/B on Y chromosome

Size

350 bp

400 bp

377 bp

450 bp

 $Dax1+\ddagger$ F: CCTTAGAAGTGTTGCTTCTG 1 cycle: 95°C for 10 minutes, 34 cycles: 96°C for 15 seconds, 58°C 150 bp R: ACAGCTCACCACAGGATCTT for 30 seconds, 72°C for 1 minutes, 1 cycle: 72°C for 5 minutes Dax1flox; 200 bp F: CCTTAGAAGTGTTGCTTCTG R: ACAGCTCACCACAGGATCTT $Dax1-\ddagger$ 300 bp F: CCTTAGAAGTGTTGCTTCTG R: GCACATTGTTCTGAGTGGCT

*Amplification of the autosomal myogenin gene was performed in multiplex PCR reactions as a control for detection of the presence of a Y chromosome, Sry¹²⁹ transgene and Tg93.

Following amplification the PCR product was digested with NlaIV as previously described (Albrecht et al., 2003). Undigested fragment indicates presence

of Sxr, whereas presence of two co-migrating bands of ~188 bp indicates presence of Sry^{AKR} . ‡ The presence of Dax1+, $Dax1^{flox}$ and Dax1- alleles was determined in a multiplex PCR reaction.