

## *Tg(mnx1:GFP)ml2*

### Transgene description

The *Tg(mnx1:GFP)ml2* transgene contains the GFP cDNA under control of a 3-kb fragment from the *mnx1* promoter (Flanagan-Steet et al., Development 132(20): 4471-4481, 2005).

### Genotyping assay

To genotype the *Tg(mnx1:GFP)ml2* line, the transgene-specific primers (**MGA03** and **MGA04**) are used.

#### **Primers:**

**MGA03:** 5' GAT GCA ACA TAC GGA AAA CTT ACC C 3'

**MGA04:** 5' TGT CTC CCT CAA ACT TGA CTT CAG C 3'

#### **PCR program (55\_30\_30):**

- 1\_94°C for 3 min
- 2\_94°C for 30 s
- 3\_55°C for 30 s
- 4\_72°C for 30 s
- 5\_Go to step 2 (above) for 34 cycles
- 6\_72°C for 5 min
- 7\_8.0°C hold
- 8\_END

#### **Product size: 247 bp**

The 247-bp product is specific for the genomic DNA containing the *Tg(mnx1:GFP)ml2* transgene. No PCR product is generated for wild-type genomic DNA.

**IMPORTANT NOTE:** It is possible that multiple copies of the transgene might have integrated into the genome during transgenesis and that some of these integrations are non-functional. Samples that contain only a non-functional transgene or its fragment will be identified falsely as positive in the genotyping assay. For this reason, it is recommended to use functional assays to verify individuals identified as positive in the genotyping assay.