

Tg(gata1:dsRed)sd2

Transgene description

The *Tg(gata1:dsRed)sd2* transgene contains the *dsRed* cDNA under control of a 7-kb fragment derived from the *gata1* promoter (Traver et al., Nature Immunology 4(12): 1238-1246, 2003).

Genotyping assay

To genotype the *Tg(gata1:dsRed)sd2* line, the transgene-specific primers (**RS4_03** and **RS4_04**) are used.

Primers:

RS4_03: 5' CCC GAC TAC AAG AAG CTG TCC 3'

RS4_04: 5' AGA TGG ACT TGA ACT CCA CCA G 3'

PCR program (62_40_30):

- 1_94°C for 3 min
- 2_94°C for 30 s
- 3_62°C for 40 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: 304 bp

The 304-bp product is specific for the genomic DNA containing the *Tg(gata1:dsRed)sd2* 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.