

Genotyping Tg(ACTB-Cre)^{2Mrt}

(B-actin Cre; ACT-CreA-cre, Act-Cre, beta-actin-Cre, beta-actin::Cre, cre^{actin})

Jax Stock #: 019099

JDW 6/14

MGI: 2176050

Reference Analysis of Fgf8 gene function in vertebrate development. Lewandoski M, Meyers EN, Martin GR. Cold Spring Harbor Symp Quant Bio, 1997.

Cre is driven in a similar manner to Susan Dymecki's original ACTB-FlpE mouse, where the human ACTB promoter (3kb flanking sequence, 78-bp 5' untranslated region, 832-bp of exon 1) is driving Cre expression.

Primers:

JDW 205 (B-actin pro FWD): 5' CGACCAGTGTTTGCCTTTTA

JDW 83 (Cre2-Rev): 5' CCTGTTTTGCACGTTACCG

B-actin is ~250 bp from the TSS.

The Cre primer is 400 bp from ATG of Cre.

*These primers have been verified to not cross-react other Cre drivers (Tie2, Cdh5(PAC)) and the forward primer is unique to the human transgene element.

Transgene= ~650 bp

Reaction Conditions:

10x CL buffer (Qiagen)	2.5µl
Q solution (Qiagen)	2.5µl
dNTPs (10mM each stock)	0.5µl
B-actin-FWD (20mM stock)	0.5µl
Cre2-REV (20mM stock)	0.5µl
DNA	1µl
Taq (Qiagen)	0.25µl
H2O	17.25µl

PCR Program:

95°C – 3 minutes
95°C – 30 seconds
58°C – 30 seconds **X 35 Cycles**
72°C – 40 seconds
72°C – 4 minutes
16°C – forever

