

EUCOMM (ES cell clone HEPD0652_5_G10; targeting vector PG00127_X_1_G01; allele Fam120btm1a(EUCOMM)Hmgu)

<http://www.knockoutmouse.org/martsearch/project/69690>

ES cell injections performed by <http://www.tigm.org/>

Received two female and one male het from the original colony (born 4/26/12)

Maintaining original colony:

Mated male (fam120b/+) with female (+/+) to maintain colony

6 pups (4 female, 2 male) born 2/21/13 (3 female and 1 male are fam120b/+), sack other two (+/+)

4 pups (1 female, 3 male) born 3/17/13 (all are fam120b/+)

Mated female (F1) from litter 2 and male (M2) of litter 1

4 pups (2 female, 2 male) born 10/7/13 (1 female is fam120b/fam120b; 1 female and 1 male are fam120b/+)

other male is (+/+)

Shipping F1 (fam120b/+), F2 (fam120b/fam120b), M1 (fam120b/+)

Making floxed mice:

Mated male (fam120b/+) with female (FLPer/+) to make floxed allele

3 pups (3 male) born 10/2/12 (2 males are flox/+; FLPer/+)

8 pups (5 female, 2 male) born 11/11/12 (3 female are flox/+; FLPer/+)

To remove FLPer transgene:

Mated male (M1) of litter 1 (10/2/12) and female wild-type (+/+)

5 pups (2 female, 3 male) born 3/24/13 (1 male is (flox/+;FLPer/+) and 1 female is (flox/+; +/+)

rest are (+/+;FLper/+) or (+/+;+/+)

* female (F2) (flox/+;+/+) died

5 pups (1 female, 4 male) born 4/18/13 (1 female is (flox/+;FLPer/+)

rest are (+/+;FLper/+) or (+/+;+/+)

To remove FLPer transgene:

Mated male (M3) from litter 1 (flox/+;FLPer/+) and female (F1) from litter 2 (flox/+;FLPer/+)

5 pups (3 female, 2 male) born 7/29/13 (1 male and 2 female are (flox/+;+/+)

rest are: male (flox/+;FLPer/+) and female (+/+;FLPer/+)

5 pups (2 female, 2 male, 1 dead) born 9/13/13 (none are desirable)

rest are: males (flox/+;FLPer/FLPer), female (flox/flox;FLPer/FLPer), female (+/+;FLPer/+)

To make homozygous floxed allele mice:

Mated male (M2) of litter 1 (flox/+;+/+) with females (F1 & F2) of litter 1 (flox/+;+/+)

Shipping M2 (flox/+;+/+), F1 (flox/+;+/+), F2 (flox/+;+/+)

Primers used, location and PCR products formed:

14752 5' primer: TGCTCTTTATTTCCATGGGG (5' of targeting vector/Frt site, 3' of exon1) (in wildtype)

21608 5' primer: GCCATCACGAGATTTTCGATT (3' of NeoR, 5' of SV40 polyA)

22425 3' primer: GGGGTGTTTTTCAGTGGAAGA (3' of Frt/loxP site, 5' of exon2) (in wildtype)

19836 5' primer: CGGTCGCTACCATTACCAGT (lacZ 3' end)

24549 3' primer: CATGATGGCAGAGTTAGGCA (3' of last loxP) (in wildtype)

14752 + 24549 = 2767 bp if wildtype

21608 + 22425 = 818 bp if knockout-first vector

14752 + 22425 = 653 bp if wildtype

19836 + 24549 = 692 bp if loxP recombined

14752 + 22425 = 770 bp if Frt recombined

14752 + 24549 = 783 bp if Frt + loxP recombined

Information including primers for genotyping from the FLPer/+ mice:

<http://jaxmice.jax.org/strain/009086.html>

For all PCR reactions, I used Denville Choice-TAQ following manufacturer protocol for PCR reactions setup:

http://www.denvillescientific.com/sites/default/files/ChoiceTaq%20DNA%20Polymerase_1.pdf

For PCR cycling conditions:

94°C, 2 min, 1 cycle

94°C, 30 sec, 35 cycles

55°C, 30 sec, 35 cycles

72°C, 45 sec, 35 cycles

72°C, 10 min, 1 cycle