

Leone et al.: Supplemental Methods

Genotyping of animals

The presence of Nestin Cre or Emx1-Cre was detected using the following primers:

cre_as	5'-AGGCTAAGTGCCTTCTCTACAC-3'
cre_s	5'-ACCAGGTTTCGTTACGCATGG-3'

For Emx1-Cre, the following primer pair was used to detect the wildtype Emx1 locus, in order to discriminate between hemizygous and homozygous Cre animals:

Emx1-Cre_wt_f	5'-ACAATCAAGAGCCCACAAGG-3'
Emx1-Cre_wt_r	5'-CTCTCCACCAGAAGGCTGAG-3'

Ldb1 floxed alleles were genotyped using the following primer pair, resulting in a PCR product of approximately 300 bp for the floxed allele, and approximately 250 bp for the wildtype allele:

Ldb1_G	5'-CTTATGTGACCACAGCCATGCATGCATGTG-3'
Ldb1_s	5'-CAGCAAACGGAGGAAACGGAAGATGTCAG-3'

Ldb2 null alleles were detected using the following primers:

Ldb2_neo5	5'-CTGTGCTCGACGTTGTCAGT-3'
Ldb2_neo3	5'-GATCCCCTCAGAAGAAGTTCGT-3'

Ldb2 wildtype alleles were assayed using the following pair:

Ldb2_F2	5'-CAGACTGCTCATCACACTTGTGAT-3'
Ldb2_R2	5'-CTCAAGAAATCCAAGGGGTGTTACTTA-3'

The Z/EG allele was tested for using the following primer pair:

EGFP_F67	5'-GTAAACGGCCACAAGTTCAG-3'
EGFP_R641	5'-TCGTTGGGGTCTTTGCTCAG-3'

Golli-t-GFP alleles were genotyped using the following primer pair:

Tau18F 5'-GGAGTTCGACGTGATGGAAG-3'
Tau219R 5'-GGCTCCCTCATCCACTAAGG-3'

In situ hybridization probes

PCR Primers used to generate probes for in situ hybridization are listed in pairs with the forward primer listed first. All reverse primers have the T7 promoter sequence (5'-gcgcgtaatacgaactactatagggc-3') added to their 5' end.

Diap3 5'-agcagttcgctgttgatg-3'
 5'-gcacgtttctcctttctgc-3'

EphA4 5'-atttcccgctcagaggctttt-3'
 5'-cgaaggggacttgacacatt-3'

EphA6 5'-ccctggtgatgttctgaat-3'
 5'-ctcgggagctactcgatcac-3'

Foxo1 5'-tattgagcgcttgactgtg-3'
 5'-tgccccaagtttgacaagt-3'

Foxp2 5'-ttgcttacttcaggcggaaat-3'
 5'-ttggttctgaatcccaaagg-3'

Igfbp4 5'-gacctggcttgagctgag-3'
 5'-ctgcaggctcagagtatga-3'

Ldb2 5'-ccctattccccgtttttt-3'
 5'-agaaggggtcactgctgttg-3'

Liprin b1 5'-gagcagtttgagcttgac-3'
 5'-tgaaatcatgaatgggagca-3'

Nrp1 5'-ccaatcagagttcccacat-3'
 5'-ccagggcagataggttcctt-3'

PlxnA2 5'-ggcaagctgaagaagattcg-3'
 5'-acattgatcctgccttctg-3'

PlxnA3 5'-tggtgtcccatgtcagaag-3'
 5'-agacatgcactgacccatt-3'

PlxnA4 5'-cagggtcagaaaggatgag-3'
 5'-catttcacggtgagtgttg-3'

Slc6a7 5'-ccaagaaggcagtgttctc-3'
 5'-agggacttatgctggggact-3'

Tle4 5'-gctattgccaactggagag-3'
 5'-gaggggtggagcatcaaata-3'