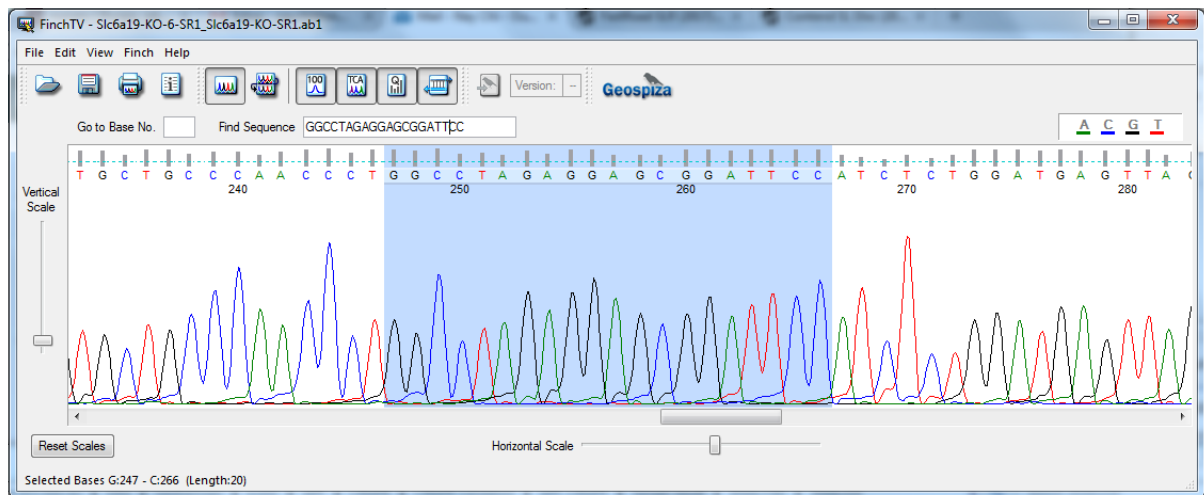


Supplementary Materials

CRISPR/Cas9 edited Slc6a19 deficient mouse strains Sanger sequencing chromatograms

1. Mouse samples ASD707:Maggot::F0#6, 8, 9, 11, 12

Guide 1

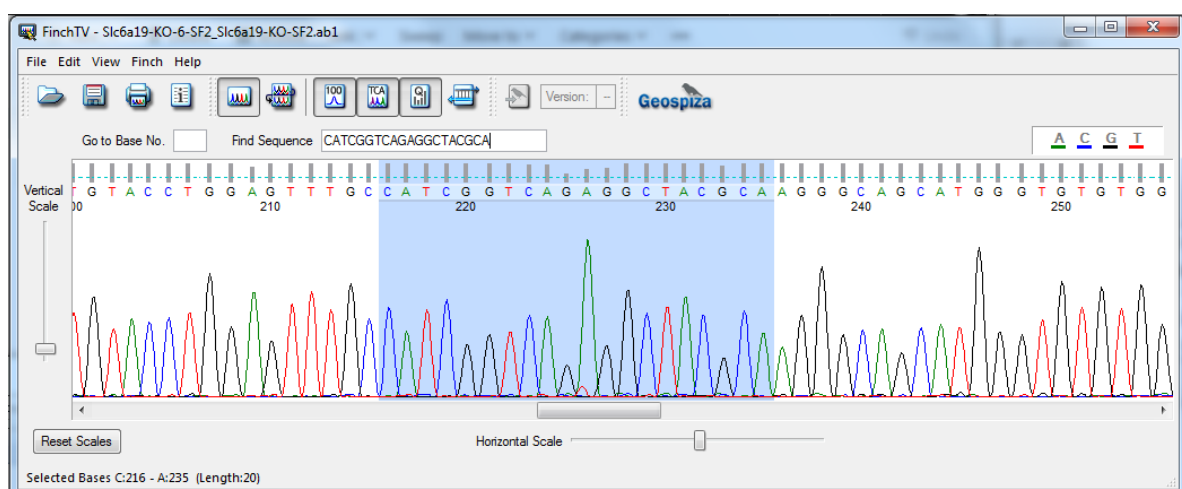


Reference AGGCTTGTGCTGCCCAACCTGGCCTAGAGGAGCGGATTCCATCTCTGGATGAGTTAGAGGTC

Allele1 AGGCTTGTGCTGCCCAACCTGGCCTAGAGGAGCGGATTCCATCTCTGGATGAGTTAGAGGTC

Allele2 AGGCTTGTGCTGCCCAACCTGGCCTAGAGGAGCGGATTCCATCTCTGGATGAGTTAGAGGTC

Guide 2



Reference TTGCTGTACCTGGAGTTTGCATCGGTCAGAGGCTACGCAAGGGCAGCATGGGTGTGTGGAGC

Allele1 TTGCTGTACCTGGAGTTTGCATCGGTCAGAGGCTACGCAAGGGCAGCATGGGTGTGTGGAGC

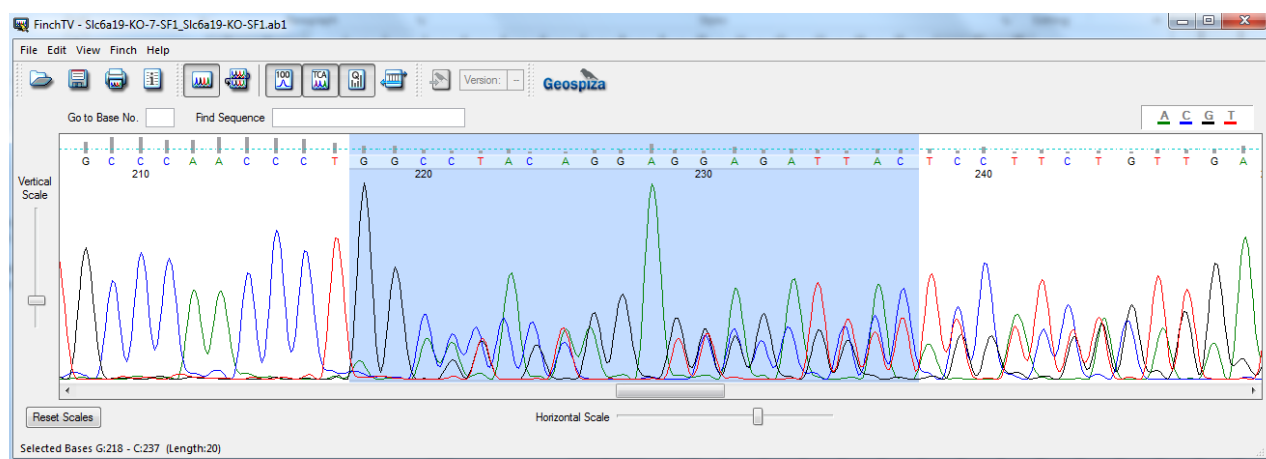
Allele2 TTGCTGTACCTGGAGTTTGCATCGGTCAGAGGCTACGCAAGGGCAGCATGGGTGTGTGGAGC

Mouse sample ASD707:Maggot:::F0#6 is WT in both alleles for both guide sequences.

Mouse samples ASD707:Maggot:::F0#8, 9, 11 and 12 have the same Sanger sequencing chromatograms as mouse sample ASD707:Maggot:::F0#6.

2. Mouse samples ASD707:Maggot:::F0#7

Guide 1



Reference GGCTTGTGCTGCCCAAC CCT GGCCTAGAGGAGCGGATTCC ATCTCTGGATGAGTTAGAGG

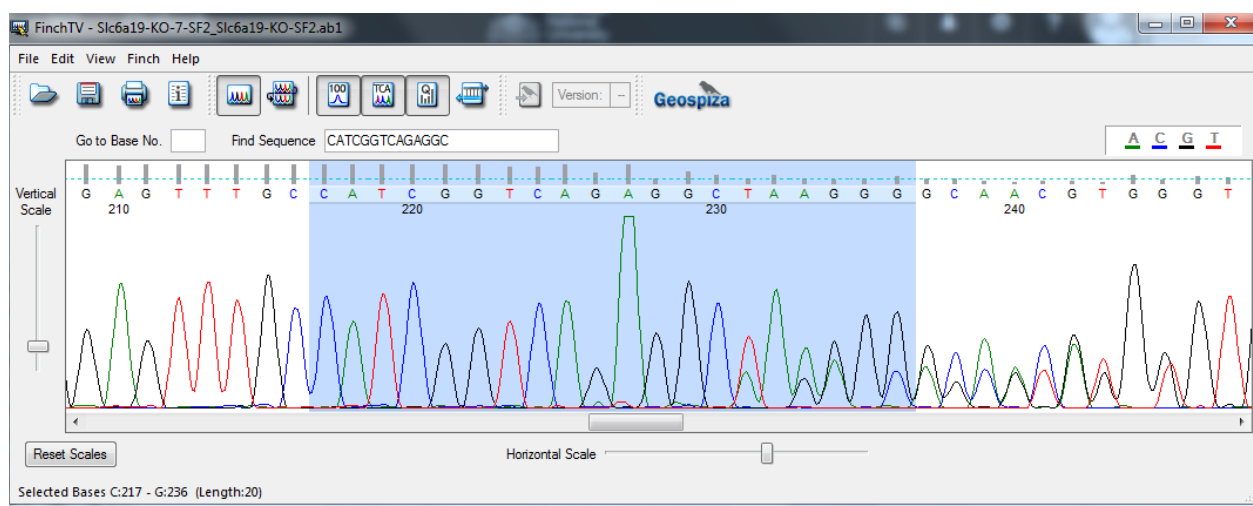
Allele1 GGCTTGTGCTGCCCAAC CCT GG CAC CCTAGAGGAGCGGATTCC ATCTCTGGATGAGTTAGAGG

Allele2 GGCTTGTGCTGCCCAAC CCT GG ----- AGGAGCGGATTCC ATCTCTGGATGAGTTAGAGG
(OR)

GGCTTGTGCTGCCCAAC CCT G ----- GAGGAGCGGATTCC ATCTCTGGATGAGTTAGAGG

Allele 3 GGCTTGTGCTGCCCAAC CCT GGCCTAGAGGAGCGGATTCC ATCTCTGGATGAGTTAGAGG

Guide 2



Reference TTGCTGTACCTGGAGTTTGC**CATCGGTCAGAGGCTACGCA**AGGGCAGCATGGGTGTGTGGAGC

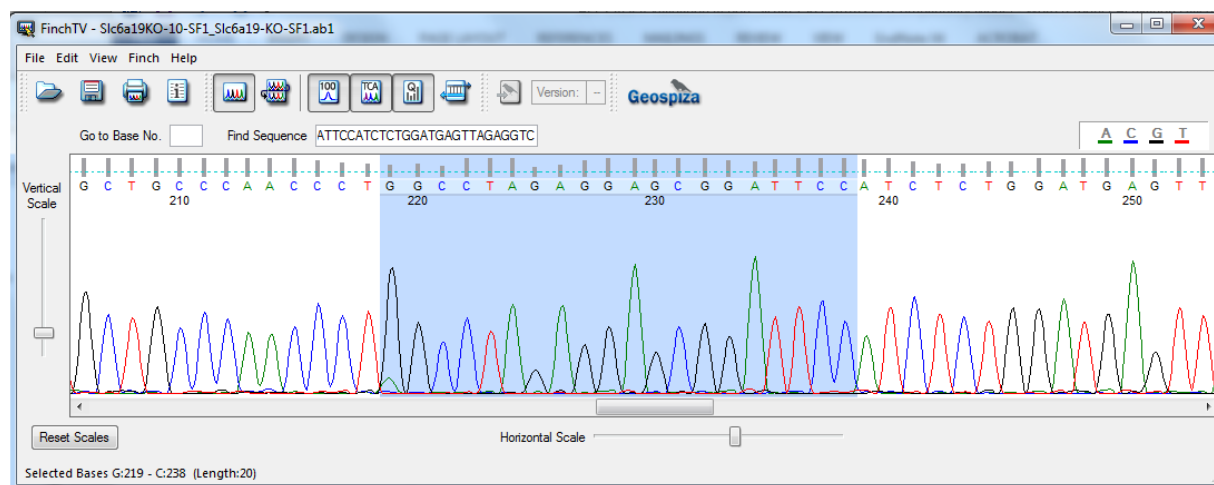
Allele1 TTGCTGTACCTGGAGTTTGC**CATCGGTCAGAGGCTA**---AAGGGCAGCATGGGTGTGTGGAGC

Allele2 TTGCTGTACCTGGAGTTTGC**CATCGGTCAGAGGC**-----AAGGGCAGCATGGGTGTGTGGAGC

Mouse sample ASD707:Maggot:::F0#7 carries three alleles in guide 1 sequence region. The first allele carries 3bp insertion, the second allele carries 5bp deletion and the third allele is WT. In guide 2 sequence region, there are two alleles. The first allele carries 3bp deletion and the second allele carries 5bp deletion.

3. Mouse samples ASD707:Maggot:::F0#10

Guide 1

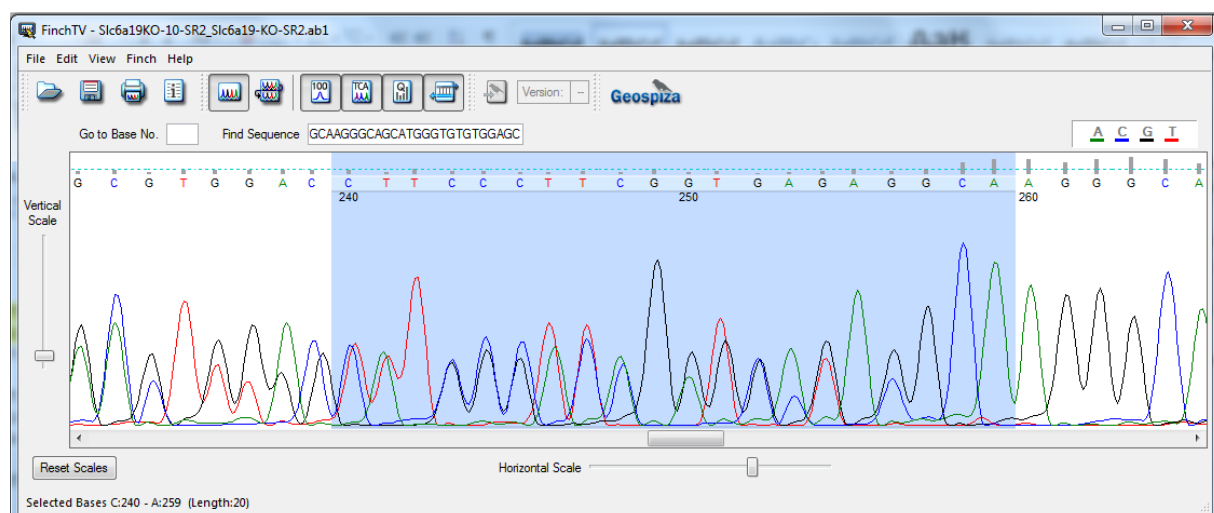


Reference AGGCTTGTGCTGCCCAAC**CCTGGCCTAGAGGAGCGGATTCC**ATCTCTGGATGAGTTAGAGGTC

Allele1 AGGCTTGTGCTGCCCAAC**CCTGGCCTAGAGGAGCGGATTCC**ATCTCTGGATGAGTTAGAGGTC

Allele2 AGGCTTGTGCTGCCCAAC**CCTGGCCTAGAGGAGCGGATTCC**ATCTCTGGATGAGTTAGAGGTC

Guide 2



Reference TTGCTGTACCTGGAGTTTGC**CATCGGTCAGAGGCTACGCA**AGGGCAGCATGGGTGTGTGGAGC

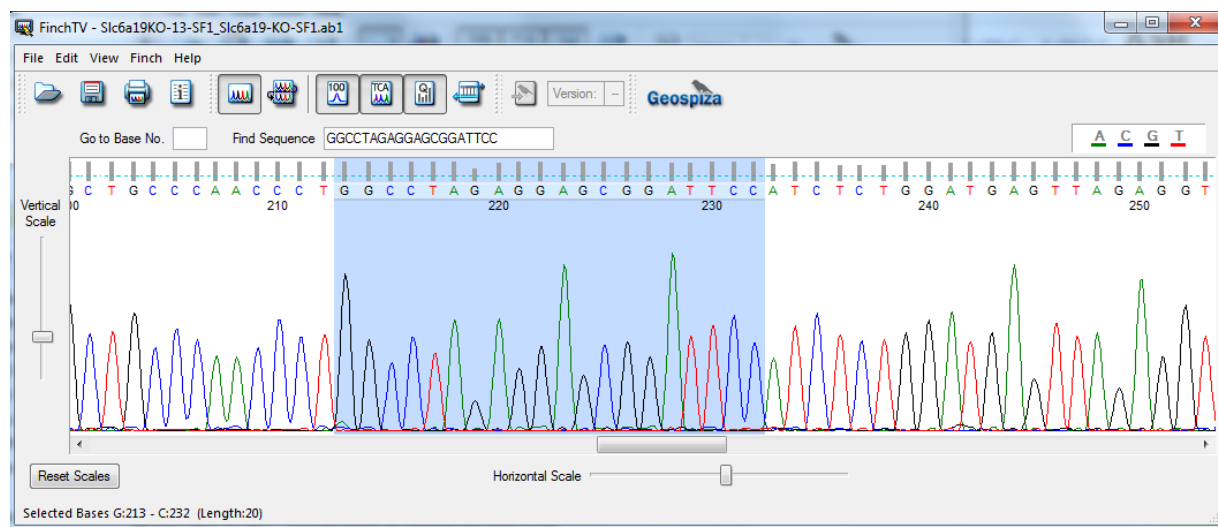
Allele1 TTGCTGTACCTGGAGTTTGC**CATCGGTCAGAG**-----GCA**AGGGCAGCATGGGTGTGTGGAGC**

Allele2 TTGCTGTACCTGGAGTTTGC**CATCGGTCAGAGGCTACGCA**AGGGCAGCATGGGTGTGTGGAGC

Mouse sample ASD707:Maggot:::F0#10 is WT in both alleles in guide 1 sequence region. In guide 2 sequence region, there are two alleles. The first allele carries 5bp deletion and the second allele is WT.

4. Mouse samples ASD707:Maggot:::F0#13

Guide 1

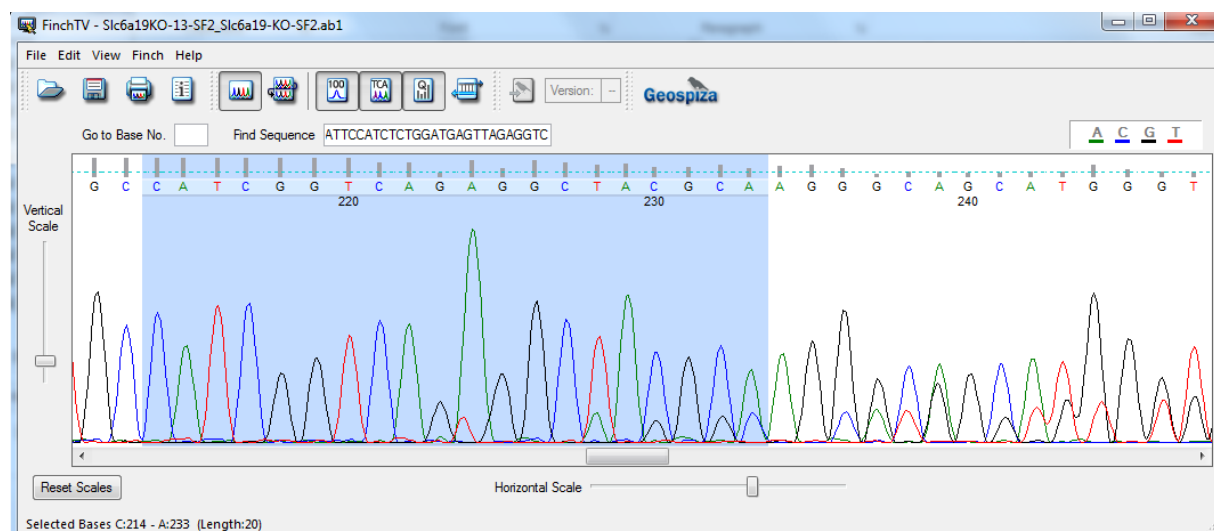


Reference AGGCTTGTGCTGCCCAAC**CCTGGCCTAGAGGAGCGGATTCC**ATCTCTGGATGAGTTAGAGGTC

Allele1 AGGCTTGTGCTGCCCAAC**CCTGGCCTAGAGGAGCGGATTCC**ATCTCTGGATGAGTTAGAGGTC

Allele2 AGGCTTGTGCTGCCCAAC**CCTGGCCTAGAGGAGCGGATTCC**ATCTCTGGATGAGTTAGAGGTC

Guide 2



Reference TGCTGTACCTGGAGTTTGC **CATCGGTCAGAGGCTACGCA** **AGG**GCAGCATGGGTGTGTGGAG

Allele1 TGCTGTACCTGGAGTTTGC **CATCGGTCAG-----TGGCA** **AGG**GCAGCATGGGTGTGTGGAG

Allele2 TGCTGTACCTGGAGTTTGC **CATCGGTCAGAGGCTACGCA** **AGG**GCAGCATGGGTGTGTGGAG

Mouse sample ASD707:Maggot::F0#13 is WT in both alleles in guide 1 sequence region. In guide 2 sequence region, there are two alleles. The first allele carries 7bp deletion and 2bp insertion and the second allele is WT.