

Supplementary data 1 : Transposon donor sequences and primers used in the study.

a. Primers used to amplify Mm523 cDNA by RT-PCR.

Mn524 (Accession N°XM_006530804.1)

Forward primer (flanked with *EcoRI*) : 5'-CCGAA**GAATTC**ATGGCCGAGGGCGGTGG-3'

Reverse primer (flanked with *XbaI*) : 5'-CCGTT**TCTAGAT**TCAGTGGGCTGGCGATGAG-3'

b. Sequence of the *Ifp2*-TIR5'-NeoR-TIR3 donor (the cassette containing the promoter SV40 - NeoR ORF - sv40 terminator is highlighted in yellow)

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TTAACCTAGAAAGATAATCATATTTGTGACGTACGTTAAAGATAATCATGCGTAAAAATTGACGCAT
GTGTTTTATCGGTCGTATATCGAGGTTTATTTATTAATTTGAATAGATATTAAGTTTTATTATAT
TTACACTTACATACTAATAATAAATTCAACAAACAATTTATTTATGTTTATTTATTTATTAATAAAA
AAACAAAAACTCAAAATTTCTTCTATAAAGTAACAAAACTTTTGGTATCGATGTCGACGAATTCTG
TGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGCTCCCCAGGCAGGCAGAAGTATGCAAAGC
ATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATG
CAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCTAACCTCCGCCCATCCCGCCCCTA
ACTCCGCCCAGTTCCGCCCATTTCTCCGCCCATGGCTGACTAATTTTTTTTTATTTATGCAGAGGCC
GAGGCCGCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTT
TGCAAAAAGCTCCCGGGAGCTTGGATATCCATTTTCGGATCTGATCAAGAGACAGGATGAGGATCG
TTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTC
GGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAG
GGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAAGTGCAGGACGAGGCA
GCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAA
GCGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCT
CCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACC
TGCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTT
GTCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAAGTGTTCGCCAGGCTC
AAGGCGCGCATGCCCGACGGCGAGGATCTCGTGTGACCCATGGCGATGCCTGCTTGCCGAATATC
ATGGTGGAAAATGGCCGCTTTTCTGGATTTCATCGACTGTGGCCGGCTGGGTGTGGCGGACCGCTAT
CAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTC
CTCGTGCTTTACGGTATCGCCGCTCCCGATTTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGAG
TTCTTCTGAGCGGGACTCTGGGGTTCGAAATGACCGACCAAGCGACGCCCAACCTGCCATCACGAG
ATTTTCGATTCCACCGCCGCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCT
GGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCAACCTTGTATTATTGCAG
CTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAAAGCATTTTTTTTCACTGC
ATTCTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTATCATGTCTGGATCCCCAgctagcTGG
CTCGAGCAATTGGCAGATCTAAGCTTGATATCTATAACAAGAAAATATATATATAATAAGTTATCA
CGTAAGTAGAACATGAAATAACAATATAATTATCGTATGAGTTAAATCTTAAAAGTCACGTAAAAG
ATAATCATGCGTCATTTTACTCACGCGGTCGTTATAGTTCAAATCAGTGACACTTACCGCATTTG
ACAAGCACGCCTCACGGGAGCTCCAAGCGGCGACTGAGATGTCTAAATGCACAGCGACGGATTTCG
CGTATTTAGAAAGAGAGCAATATTTCAAGAATGCATGCGTCAATTTTACGCAGACTATCTTTC
TAGGGTTAACCGCGGTGGAGCTCCAGCTTTTGTTCCTTTAGTGAGGGTTAA
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c. Primers to amplify loci containing *Ifp2* insertions

First linear amplification (B = biotin)

(B)-NeoR 5' : (B)-TTCTTCGCCACCCCAACTTGTTTATTGC-3'

(B)-NeoR 3' : (B)-GACTTTCACACCCTAACTGACA-3'

Linkers

Oligo I : 5'-GACCCGGGAGATCTGAATTCAGTGGCACAGCAGTTAGG-3'

Oligo II DpnII : 5'-GATCCCTAACTGCTGTGCCACTGAATTCAGATC-3'

Oligo II PNB : 5'-CATGCCTAACTGCTGTGCCACTGAATTCAGATC-3'

First round of nested PCR

Primer anchored in linker

LC1 : 5'-GACCCGGGAGATCTGAATTC-3'

Primers anchored in the 5' or 3' end of the *Ifp2* vector

(B)-ITR-UTR 5' PB III : (B)-CGATAAAACACATGCGTCAAT -3'

(B)-ITR-UTR 3' PB III : (B)-GCTATTTAGAAAGAGAGAGCA -3'

Second round of nested PCR

Primer anchored in linker

LC2 : 5'-GATCTGAATTCAGTGGCACAG-3'

Primers anchored in the 5' or 3' end of the *Ifp2* vector

ITR-UTR PB 5'III : 5'-CGATAAAACACATGCGTCAAT -3'

ITR-UTR PB 3'III : 5'-GCTATTTAGAAAGAGAGAGCA-3'

d. Sequences used as baits to identify transposon breakpoints in analyses done with lumpy.

Sequence of the *Ifp2*-TIR5'-NeoR-TIR3 sequence flanked upstream and downstream by 100-bp plasmid regions. The cassette containing the promoter SV40 - NeoR ORF - sv40 terminator was highlighted in yellow. TAA TSD were bolded while 100-bp plasmid backbone sequences were typed in blue.

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ATTAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGTTGTAAAACGACGGCCAGTGAGCGCGC
GTAATACGACTCACTATAGGGCGAATTGGGTACCTTAACCCCTAGAAAGATAATCATATTTGTGACGT
ACGTTAAAGATAATCATGCGTAAAATTGACGCATGTGTTTTATCGGTCTGTATATCGAGGTTTATT
TATTAATTTGAATAGATATTAAGTTTTATTTATATTTTACACTTACATACTAATAATAAATTC AACAA
ACAATTTATTTATGTTTTATTTATTTATTTAAAAAAAACAAAAACTCAAATTTCTTTCTATAAAGTA
ACAAAACTTTTGGTATCGATGTCGACGAATTCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTC
CCCAGCTCCCCAGGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGG
AAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAT
AGTCCCGCCCTAACTCCGCCATCCCGCCCTAACTCCGCCAGTTCCGCCATTTCTCCGCCCA
TGGCTGACTAATTTTTTTTTATTTATGTCAGAGGCCGAGGCCGCTCGGCCTCTGAGCTATTCCAGAA
GTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTCCCGGGAGCTTGGATATCCAT
TTTCGATCTGATCAAGAGACAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGC
AGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTG
CTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGGCGCCCGTTCTTTTTGTCAAGACCGACCT
GTCCGTTGCCCTGAATGAACTGCAGGACGAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGT
TCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGACTGGCTGCTATTGGGCGAAGT
GCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGC
AATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGACCACCAAGCGAAACATCGCAT
CGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTGTCATCAGGATGATCTGGACGAAGAGCATCA
GGGGCTCGCGCCAGCCGAACCTGTTFCGCCAGGCTCAAGGCGCGCATGCCCGACGGCGAGGATCTCGT
CGTGACCCATGGCGATGCCGTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTTCTGGATTTCAT
CGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGC
TGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTC
GCAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGACTCTGGGGTTTCGAAATG
ACCGACCAAGCGACGCCAACCTGCCATCACGAGATTTTCGATTCACCGCCGCTTCTATGAAAGG
TTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTG
GAGTTCTTCGCCACCCCAACTTGTTTATTTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATC
ACAAATTTACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTTGTCCAAACTCATCAAT
GTATCTTATCATGTCTGGATCCCCAgctagctGGCTCGAGCAATTGGCAGATCTAAGCTTGATATC
TATAACAAGAAAATATATATAATAAAGTTATCACGTAAGTAGAACATGAAAATAACAATATAATTA
TCGTATGAGTTAAATCTTAAAAGTACGTAAGATAATCATGCGTCATTTTGACTCACGCGGTCCG
TTATAGTTCAAATCAGTGACACTTACCGCATTGACAAGCACGCCTCACGGGAGCTCCAAGCGGGC
ACTGAGATGTCCTAAATGCACAGCGACGGATTCGCGCTATTTAGAAAGAGAGAGCAATATTTCAAG
AATGCATGCGTCAATTTTACGCAGACTATCTTTCTAGGGTTAACCCGCGGTGGAGCTCCAGCTTTTG
TTCCCTTTAGTGAGGGTTAATTGCGCGCTTGGCGTAATCATGGTCATAGCTGTTTCTGTGTGAAA
TTGTTATCCGCT
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