

Supplementary figure 1

(intron4)
TCTTCTGGTG CTGCTATAGC CTGGTGGGCC TGATGACAGG TTGCCCATCT GAGTTTCTCT ATTCCCTAG

(exon5)
ACCAGAATGA GTGTATCATT GCCAACCCCTG CCTTCGTGGT CTACTCCTCC ATCGTCTCGT TCTACGTGCC
CTTCATCGTC ACCCTGCTGG TCTATATCAA AATCTACATC GTTCTCCGCA AGCGTCGGAA GCGGGTCAAC

(intron5)
ACCAAGCGTA GCAGCCGAGC TTTCAGAGCC AACCTGAAGA CACCACTCAA G GTCTCCAAC CTCAGCCCCA
ACATGGGTCT CTACCTAAGC ATTATCAAGAG AGCTAATATT ACACATGGGT C GGGCCTGGA ACATTACAGT
AAGGTGGAAG TCTAGGCTGG AATAGTTTCC TGGGGTGAGA TGAGGGTGTA GACCTCAGTG GAGTGACAGA
ATTTTACAA TGGGACTATG GTCCCTGGTG GGAGCTAAGT AGGATTGCGC ATGTGAAGAT CTTTGTGGCT
GTATGAAGCA ATTCCTACTT GATCTGATCC TTAGTTTCTC TATTCTTTCT CAGGTAGTTC TGCCTTTCTC
ATTATGGCCT CCATGTTTCC TTCCCCCTTC TTCCATCTTC TCTATACCAT TCTTTGTACC TGCTATGCTC
AGCTCTACCC TCCATGTACA CCCCTGCCTC CTCTCCCCC ACTTTTTCCT CTGCTTTTTT TTTTTTATC
ATAAAATCTC TCTCTTTCAC TCAACATTCT ACAATGAAGG CAGTAAGTGG GTATGGAAAT ATCAAGAACT
TATGGGTTAG ATACATCAGG TTCAAATCCT GGTCTTTTCA CTTTTTAA ATTGTGTGTC CTTAGGCATG
TTGGTTAGCT TCTATGAGCC TTGGTTTCTT CTCTGTAA GTGGGAGTCA TGTGAATTC ACAGGGTTTT
CCTGAAGATT TGATGTGAGA AAGGATGTGA GCATGTGCCT AGCATGATCT TGAGTAGGTC CTCCACAAAG
AACAAGCTCC TTTTGCTCT CACCTTGCTC GCCTCTCTC ATCAGTGAC CAGCCTTCCC TCTGCCCCGA
CTGTCTTCTG TGGCCACAC TCCTCTAGT GCTGAGCCCC TGACGAGAGT CTGAGTTCTC CATGGACTCC
TTTGCTTGG GTTCTATT CTTACCACT TCTGCTCTCC ACTGTCTTGT GTGACCATG TGCTGGCTCA

(exon6)
CTCCACAG GG CAACTGTACC CACCCTGAGG ACATGAACT CTGCACCGTT ATCATGAAGT CTAATGGGAG

(intron6)
TTTCCCACTG AACAGGCGGA GAATG GTAAG TGTCAGGTC AGGGACACAA TGCCATCTTT CTGCCTACCC
CCACCAATGG AGCCACCAT CCCTGATCCT AGAATCTCAG CTATTTTAA GGAGAAGTGT CTCCTGGCAC
CCCTACTTTG CTCAGCTGA GAGCACATTT ACATTGTACA CTCTGAGTA GAGAGAGATG CTTAATTCT
GCAGGGCACA GATATGTTGA AGCTTGTGG GGAAATAATC TACTCATAAA ACCTAGCAAA AGTGACTATA
CAGGCTAGT CCACTCCTCA AACACCTCCA TGCTTCTGA TATCATCA AATCCTCAGG TAACCTGGG
GAGTAATTCT TACTGGTCTT CAGCTCACAG CAGAGGTAGC CAAGGCTCAG AGTACAGGTA GCTCACCCAA
GTCTAAACAG TTAGTGAAG AGTGCAATTT GGAGCCAAGA TCTGTGTGAC TTCGAAATCC ACATCCAAGT
TTTTCCATT AGCATGCACC ACCTCTAGA TAGGCAGCTT CTGAGGCTGG GAGCTGGTGG CCAGGTGAG
GGTGGGGACA GAGCAGAGCA GCCGGGGTAG ACAAGAAGCA TATTGTGAAC ATAGAACCTA TAAATGCAGA
CTTATAGCAT ACTTGAGCTC TCCATGGTGC TAGTTACAAC CAGAGTTCAA GAAGCAGGCA TTTTCATCCC
CAGCTAAGT GGGATACATA AAATCCAGCA ATATGCTCT TAGATAGGCA AGGTCCCTAC AATTGGCTGG
ATTCCAAGGA CAGGACTCTA ATGAACATG TGAATATAG GACTAAAAAC AGATCTCAAG TTATATTCAA
GGCAGCAGCC CATTTTTCAC CATCTGGCA CTAGAGTGT ATTTACAGAG CTGATCCTAG ATCACAAGAG
GTCTGGGACA GTGGAGTCTA AAGAGGAACT GGGAAGCTAT GTGTGGATCC ATGTTGGAGC TTCTGGGTCA
GCCTACCAAG GAAGACCATA TGGCACTTCC AGATCAGCTC TATGCTTCGG AACCAAGCTA GTCAGCCAC
ATATCCTTGG TGGTGAGGT GCCTGTACTC CAGCCTGGCA GGGAGGATGG AGAATCATGAT TTTTATGTAG
TTAGAATTAA GTTCTTGAAG GTGAAGCAAG ACTGAATTC AGTCAGGGTT TATCTTAGCA GCTGAATTGG
TGCCCGGCC TTAGCACTCA GGAAGTGTCA CTCAGGTTAT TAAAGAGAA GTGGATGGGT GCTAGCATCC
AAGCATTTCT AGGGTATTGA GGCTTACAG ATTGCTCTGG GCAGTGGTCC AGGAGTAACT GCCGTGAGT
TGAGTGCTGT ATTCAGATGG TCCCTGCCTC CAGTGATGG CTCTCTTGT GTTCTGGCA GAGAAGCCAT
GCTGTTTGA AGAGTGTGA GAGGGCAGG AGGACCGAGG AGGCTTGGT GCTTCTGCC AGGAATTTCA

(exon7)
TCCTAAGTTC TCTCTCTCTG CTTACG GATG CTGCCCCGCG AGCTCAGGAG CTGGAATGG AGATGCTGTC
AAGCACCAGC CCCCCAGAGA GGACCCGTA TAGCCCCATC CCTCCAGTC ACCACCAGCT CACTCTCCCC
GATCCATCCC ACCACGGTCT ACATAGCAAC CCTGACAGTC CTGCCAAACC AGAAAAGAAT GGGCATGCCA
AGATTGTCAA TCCCAGGATT GCCAAGTTCT TTGAGATCCA GACCATGCC AATGGCAAAA CCCGGACCTC
CCTTAAGACG ATGAGCCGCA GGAAGCTCTC CCAGCAGAAG GAGAAGAAAG CCACTCAGAT GCTTGCCATT

(artificial intron including loxP)
GTTCTTG GTAC GTCGTATAAC TTCGTATAAT GTATGCTATA CGAAGTTATG TTGA TGGTTC TTCCATATTC

(combined exons 5-6-7) (exon5)
CCCTAG ACCA GAATGAGTGT ATCATTGCCA ACCCTGCCTT CGTGGTCTAC TCCTCCATCG TCTCGTTCTA
CGTGCCCTTC ATCGTACCC TGCTGGTCTA TATCAAAATC TACATCGTC TCCGCAAGCG TCGGAAGCGG

(exon6)
GTCAACACCA AGCGTAGCAG CCGAGCTTTC AGAGCCAACC TGAAGACACC ACTCAAG GGC AACTGTACCC

(exon7)
AATG GATGCT GCCCGCCGAG CTCAGGAGCT GGAAATGGAG ATGCTGTCAA GCACCAGCCC CCCAGAGAGG
ACCCGGTATA GCCCATCCC TCCAGTCC CACAGCTCA CTCTCCCGA TCCATCCCAC CACGGTCTAC
ATAGCAACCC TGCAGTCTT GCCAACCAG AAAAGAATGG GCATGCCAAG ATTGTCAATC CCAGGATTGC
CAAGTTCTTT GAGATCCAGA CCATGCCCAA TGGCAAAACC CGGACCTCCC TTAAGACGAT GAGCCGCAGG

(intron downstream of the combined exons 5-6-7)
AAGCTCTCCC AGCAGAAGGA GAAGAAAGCC ACTCAGATGC TTGCCATTGT TCTTG GTGAG TAAGCTCTGG
GTGATGGCCA CAGCCCTGCC GTGCCAGCC CTGGCAACAT CCCAGCAGGT CCTAGACTCT GCCTGTTG

Legend for Supplementary figure 1

The sequence of the artificial intron, the combined exons 5-6-7 and the surrounding regions included in the targeting vector. The sequences from 70 bp at the 3' end of intron 4 of the mouse *Drd2* (D2R) gene to 85 bp of the 3' downstream of the combined exons 5-6-7 used in the targeting vector are described. The sequences of exons 5, 6 and 7 are written in blue, orange and green color, respectively. The artificial intron is located between the downstream of exon 7 and the upstream of the combined exons 5-6-7. The loxP sequence is written in red color and the adenosine enclosed by a navy-blue box represents an RNA splicing branch site.