## **Supplementary Data**

CTCGAAGTGCCCGCCCTGGCTGACTTCAATAGGGCCTGGACTGAGCTCACCGACTGGCTGTCCCTGCTCGATCGCGTGATCAAG TCTCAGCGCGTGATGGTCGGCGACCTGGAGGATATTAACGAAATGATCATCAAGCAGAAGGCCACCCTCCAGGACCTGGAGCAG CGAAGGCCCCAGCTCGAGGAACTGATCACAGCCGCTCAGAACCTGAAAAATAAGACTTCCAATCAGGAGGCCCCGGACAATCATT ACTGACAGAATCGAACGAATTCAGTCTCAGTGGGATGAGGTGCAGGAACACCTGCAGAACCGCCGGCAGCAGCTCAACGAAATG CTCAAAGATTCAACCCAGTGGCTCGAGGCTAAAGAGGAG

**Supplementary Figure 1.** Nucleotide sequence of the  $\sim$  0.4-kb highly recombinogenic region used in the generation of the 7-kb mini-dystrophin dual AAV vectors in this study. This region includes part of hinge 3, whole spectrin-like repeat R20, and part of R21.