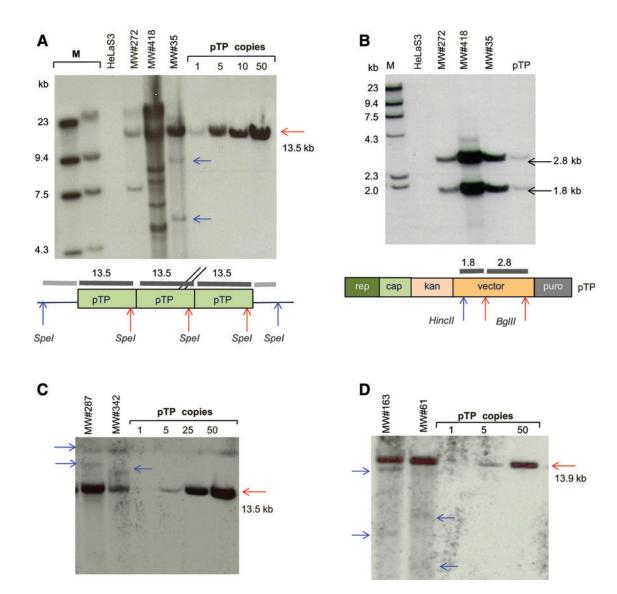
## **Supplementary Data**



**Supplementary Figure S1.** Characterization of genomic DNA isolated from selected MWs by Southern blot analysis. (**A**) Analysis of genomic DNA from AAVrh8R/FVIII-5.1 MWs. Genomic DNA from MW#272, #418, and #35 was isolated and digested with Spel, which cuts once in the vector-rep-cap-containing pTP plasmid and generates a fragment with a 13.5 kb-unit length (diagram below). The copy number standard was generated by digesting the parental pTP plasmid with Spel. Flanking fragments are shown (blue arrows). (**B**) Integrity of the vector genome in the AAVrh8R/FVIII-5.1 MWs. The presence of the full-length expression cassette was assessed by digestion with the restriction enzymes HincII and BgIII, which cut at the 5′, middle, and 3′ regions of the expression cassette to generate 1.8 and 2.8 kb fragments (diagram below). (**C**) Analysis of the genomic DNA from AAVrh8R/FVIII-5.1 MWs. (**D**) Analysis of the genomic DNA from AAVrh8R/FVIII-5.4 MWs. Spel digestion of the parental pTP plasmid generates a fragment with a 13.9 kb unit length.