Supplementary Table S3. *Specific productivity and genomic DNA analysis for selected MWs*

Vector	*MW #*	*Productivity*[a] *(vg/cell),* n	*Copies/cell*[b] *FVIII*	*Rep*	*Puro*
AAVrh8R/5.1	35	$1.0\times10^5\pm1.9\times10^4$ (H) (5)	52	47	48
AAVrh8R/5.1	272	$5.8\times10^3\pm1.0\times10^3$ (M) (2)	15	18	17
AAVrh8R/5.1	418	$1.5\times10^4\pm4.7\times10^3$ (M) (7)	191	191	202
AAVrh8R/opt-5.1[c]	14	$5.1\times10^4\pm2.5\times10^4$ (H) (8)	1072	1115	1016
AAVrh8R/opt-5.1[c]	27	$2.9\times10^4\pm9.6\times10^3$ (M) (7)	56	51	52
AAV8/5.1	287	$2.4\times10^5\pm5.0\times10^4$ (H) (8)	212	208	182
AAV8/5.1	342	$8.2\times10^5\pm3.9\times10^4$ (H) (8)	61	61	66
AAVrh8R/5.4	61	$1.2\times10^4\pm1.1\times10^4$ (M) (9)	184	179	169
AAVrh8R/5.4	163	$5.1\times10^4\pm2.1\times10^4$ (H) (6)	196	181	162
AAV2/SEAP-4.3[d]	156	$2.1\times10^5\pm9.5\times10^4$ (H) (10)	0	48	48
	HELAS3		0	0	0

[a]Vector production in 20 mL shaker flask cultures was measured by qPCR using FVIII-A2 primer/probe set. H, high-producing MWs are defined as $\geq5.0\times10^4$ vg/cell; M, medium producer as 5.0×10^3 to 5.0×10^4 vg/cell. N, number of independent measurements.

[b]Copy numbers of FVIII (FVIII-A2 primer/probe set), *rep* and *puro*^{R} genes by qPCR (levels normalized to E6 gene in HeLaS3 cells [11 copies per HeLaS3 genome]).

[c]MWs containing mTTR202opt-HI-FVIII expression cassette.

[d]Published data.[26]