

Supporting Table 1. Plasmids for AAV vector production.

	Plasmid	Size ITR- ITR (bp)	AAV serotype	
			2/2	2/8
Normal Size (NS)	pZac2.1-CMV-EGFP-SV40	3006	X	X
	pZac2.1-CMV-RFP-SV40	2653		X
	pAAV-CMV-DsRed-HGH	2828		X
	pZac2.1-RHO-EGFP-SV40	2900		X
Oversize (OZ)	pAAV2.1-CMV-EGFP-9.9-SV40	9954	X	X
	pZac2.1-CMV-ABCA4_3xflag-SV40	8619	X	
	pAAV2.1-CBA-MYO7A_HA-BGH	8220	X	
Overlapping (OV)	pZac2.1-CMV-ABCA4_5'	4900	X	X
	pZac2.1-RHO-ABCA4_5'	4805		X
	pZac2.1-RHOK-ABCA4_5'	4169		X
	pZac2.1-VMD2-ABCA4_5'	4658		X
	pAAV2.1-CBA-MYO7A_5'	4708	X	X
	pAAV2.1-RHO-MYO7A_5'	4699		X
	pZac2.1-ABCA4_3'_3xflag_SV40	4740	X	X
	pAAV2.1-MYO7A_3'_HA_BGH	4655	X	X
Trans-splicing (TS)	pZac2.1-CMV-ABCA4_5'TS	4431	X	
	pZac2.1-CMV-3xflag-ABCA4_5'TS	4497	X	X
	pZac2.1-RHO-ABCA4_5'TS	4321		X
	pZac2.1-ABCA4_3'TS_3xflag_SV40	4587	X	X
	pAAV2.1-CBA-MYO7A_5'TS	4468	X	X
	pAAV2.1-RHO-MYO7A_5'TS	4459		X
	pAAV2.1-MYO7A_3'TS_HA_BGH	4298	X	X
	pZac2.1-CMV-EGFP_5'TS	1906	X	X
	pZac2.1-CMV-EGFP_5'TS-L	4016	X	X
	pZac2.1-RHO-EGFP_5'TS	1802		X
	pZac2.1-EGFP_3'TS_SV40-	1510	X	X
	pZac2.1-EGFP_3'TS_SV40-L	4551	X	X

	Plasmid	Size ITR- ITR (bp)	AAV serotype	
			2/2	2/8
Hybrid AP (AP)	pZac2.1-CMV- <i>ABCA4</i> _5'AP	4708	X	
	pZac2.1- <i>ABCA4</i> _3'AP_3xflag_SV40	4871	X	
	pAAV2.1-CBA- <i>MYO7A</i> _5'AP	4746	X	
	pAAV2.1- <i>MYO7A</i> _3'AP_HA_BGH	4576	X	
Hybrid AK (AK)	pZac2.1-CMV- <i>ABCA4</i> _5'AK	4540	X	
	pZac2.1-CMV-3xflag- <i>ABCA4</i> _5'AK	4606	X	X
	pZac2.1-RHO- <i>ABCA4</i> _5'AK	4436		X
	pZac2.1- <i>ABCA4</i> _3'AK_3xflag_SV40	4702	X	X
	pZac2.1- <i>ABCA4</i> _3'AK_HA_SV40	4663		X
	pAAV2.1-CBA- <i>MYO7A</i> _5'AK	4577	X	X
	pAAV2.1-RHO- <i>MYO7A</i> _5'AK	4568		X
	pAAV2.1- <i>MYO7A</i> _3'AK_HA_BGH	4421	X	X
	pZac2.1-CMV- <i>EGFP</i> _5'AK	2015	X	X
	pZac2.1-CMV- <i>EGFP</i> _5'AK-L	4125	X	X
	pZac2.1-RHO- <i>EGFP</i> _5'AK	1911		X
	pZac2.1- <i>EGFP</i> _3'AK_SV40	1614	X	X
	pZac2.1- <i>EGFP</i> _3'AK_SV40-L	4660	X	X

N.B. CMV: cytomegalovirus promoter; RHO: human Rhodopsin promoter; RHOK: human Rhodopsin kinase promoter; VMD2: vitelliform macular dystrophy 2 promoter; EGFP: enhanced green fluorescent protein; RFP: red fluorescent protein; DsRed: *Discosoma* sp. red fluorescent protein; *ABCA4*: human ATP-binding cassette, sub-family A, member 4; *MYO7A*: human MYOSIN VIIA; SV40: simian virus 40 poly-adenylation signal; HGH: human growth hormone poly-adenylation signal; BGH: bovine growth hormone poly-adenylation signal; 3xflag: 3xflag tag; HA: hemagglutinin tag; AP: alkaline phosphatase recombinogenic region; AK: F1 phage recombinogenic region; L: dual AAV vectors containing a combined (5'+3') large (>5 Kb in length) genome.