

Supplementary Table S1. Detail of experimental vector preparations used for in vitro and in vivo experiments

<i>Capsid</i>	<i>Promoter</i>	<i>Transgene</i>	<i>Titer</i>	<i>Experiment</i>
AAV2	CBA	GFP	1.45×10^{13}	<i>In vitro</i> transduction study
Trp1YF	CBA	GFP	9.27×10^{12}	<i>In vitro</i> transduction study
Trp1YF+TV	CBA	GFP	8.90×10^{12}	<i>In vitro</i> transduction study
QuadYF	CBA	GFP	1.64×10^{13}	<i>In vitro</i> transduction study
QuadYF+TV	CBA	GFP	2.66×10^{13}	<i>In vitro</i> transduction study
AAV2	VECad	GFP	5.11×10^{13}	<i>In vivo</i> transduction study
QuadYF+TV	VECad	GFP	9.82×10^{12}	<i>In vivo</i> transduction study
	VECad	GFP	5.50×10^{13}	<i>In vivo</i> transduction study
	VECad	GFP	4.66×10^{13}	<i>In vivo</i> transduction study
AAV2	CMV-smVECad	Luc	1.52×10^{12}	<i>In vivo</i> bioluminescence study
QuadYF+TV	CMV-smVECad	Luc	4.44×10^{12}	<i>In vivo</i> bioluminescence study
AAV2	smCBA	mCherry	2.35×10^{12}	<i>In vitro</i> transduction study
QuadYF+TV	smCBA	mCherry	4.83×10^{12}	<i>In vitro</i> transduction study

AAV2, adeno-associated virus serotype 2; CBA, chicken β -actin; CMV, cytomegalovirus; CMV-smVECad, CMV enhanced small vascular endothelial cadherin; GFP, green fluorescent protein; Luc, firefly luciferase; mCherry, red fluorescent protein; QuadYF, QuadYF+TV, Trp1YF, Trp1YF+TV, AAV vectors incorporating up to five Y-F/T-V mutations (Y272F, Y444F, Y500F, Y730F, T491V); smCBA, small chicken β -actin; VECad, vascular endothelial cadherin.