

**1 Lentiviral sgRNA-Cas9 Expression Vector**

5'-LTRt—Pack1—hU6—sgRNA—PGK—Cas9—P2A—Reporter—Pack2--3'-LTRt-PolyA-Amp<sup>R</sup>  
 (size 10.2-11.2 kb) Sa, Sp GFP, RFP, Puro, BSD

**2 Lentiviral Strep-BioID Expression Vector**

5'-LTRt-Pack1—CMV—ORF-Twin-Strep-II-BioID—P2A--Puro--Pack2--3'-LTRt-PolyA--Amp<sup>R</sup>  
 (size 8.0 kb)

**3 Lentiviral Tet-on Strep-BioID Expression Vector (all-in-one)**

5'-LTRt-Pack1---tightTRE--ORF- Twin-Strep-II-BioID—PGK-rtTA-P2A-Puro-Pack2--3'-LTRt--PolyA--Amp<sup>R</sup>  
 (size 9.6 kb)

**4 Lentiviral Tet-on ORF cDNA Expression Vector (all-in-one)**

5'-LTRt-Pack1---tightTRE—ORF-V5—PGK-rtTA-P2A-Puro--Pack2--3'-LTRt-PolyA-Amp<sup>R</sup>  
 (size 8.3 kb)

**5 Lentiviral Tet-on shRNA Expression Vector (all-in-one)**

5'-LTRt-Pack1-hU6-TetO--shRNA—PGK-rtTA-P2A-Puro--Pack2--3'-LTRt-PolyA--Amp<sup>R</sup>  
 (size 7.5 kb) BSD, GFP, RFP

**6 Retroviral cDNA Expression Vector**

5'-LTR—MESV package--eEF1a---cDNA-V5—P2A--GFP—WPRE--3'-LTR—PolyA--Amp<sup>R</sup>  
 (size 7.0 kb)

**7 AAV sgRNA-Cas9 Expression Vector**

5'-AAV8 ITR—hU6-sgRNA--PGK—SaCas9---hGH polyA--AAV8 ITR--Amp<sup>R</sup>  
 AAV2 ITR AAV2 ITR (size 8.0 kb)

**8 AAV Cre Expression Vector**

5'-AAV8 ITR-----Prom-----Cre-P2A--Reporter---hGH polyA--WPRE--3'-AAV8 ITR--Amp<sup>R</sup>  
 AAV2 ITR CBA, PGK GFP, RFP AAV2 ITR  
 (size 5.4-6.5 kb) eEF1a, SYN, etc (Capacity 1.5 kb)