

General Vector list 1

1

Lentiviral ORF cDNA expression vector

5'-LTRt—Pack1--Prom-cDNA-Tag—(T2A)-(PGK)-(Reporter)-(P2A)-(Selection)--Pack2--3'-LTRt-PolyA--Amp^R

(size 6.8-9.0 kb) CMV V5, Flag, GFP, RFP Puromycin
 eEF1α Myc, HA, Luciferase Blasticidin
 MSCV Twin-Strep-Tag II.

2

Lentiviral TF/ Promoter reporter vector

5'-LTRt—Pack1--(EF1α-Selection)------(Enhancer)-TF binding--TATA-Reporter--Pack2--3'-LTRt-PolyA-Amp^R

(size 6.5-8.0 kb) Puromycin GFP, RFP
 Blasticidin Luciferase

3

Lentiviral shRNA/miRNA/sgRNA expression vector

5'-LTRt—Pack1—U6—shRNA/miRNA/sgRNA—PGK-(Reporter)—P2A-Selection-Pack2--3'-LTRt--PolyA-Amp^R

(size 7-9 kb) hU6 GFP, RFP Puromycin
 mU6 Luciferase Blasticidin

4

AAV ORF cDNA expression vector

5'-AAV8 ITR----- Prom -----cDNA---Tag----hGH polyA--WPRE-3'-AAV8 ITR--Amp^R

AAV2 ITR CBA, PGK V5 AAV2 ITR
 (size 5.4-5.6) eEF1a, SYN (Capacity 2-3.5kb)

5

AAV shRNA/miRNA/sgRNA expression vector

5'-AAV8 ITR— hU6 ---shRNA/miRNA/sgRNA—PGK--Reporter—hGH polyA--WPRE-3'-AAV8 ITR--Amp^R

AAV2 ITR GFP, RFP AAV2 ITR
 (size 6.0 kb) (Capacity 3.0 kb)

6

Non-viral ORF cDNA expression vector

CMV- MCS1-Tag--(MCS2)—(P2A)-(Reporter)—PolyA—Neomycin---Amp^R

↓ GFP, RFP

V5, Flag, Myc HA, His, GFP, RFP, P2A, T2A,
 Pr-Linker, IgG1Fc, Twin-Strep-Tag II (size 5.5-6.5 kb)

1

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

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

2

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

5'-LTRt-Pack1--tTRE—ORF-V5—PGK-rtTA-P2A-Puro--Pack2--3'-LTRt-PolyA--Amp^R
 (size 8.3 kb) BSD

3

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

5'-LTRt-Pack1--tTRE--ORF- Twin-Strep-II-BioID—PGK-rtTA-P2A-Puro-Pack2--3'-LTRt--PolyA--Amp^R
 (size 9.6 kb) BSD

4

Lentiviral sgRNA-Cas9 Expression Vector (all-in-one)

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

5

Lentiviral Promoter reporter vector

5'-LTRt—Pack1--(EF1α-Selection)-----Promoter--Reporter--Pack2--3'-LTRt-PolyA-Amp^R
 (size 6.5-9.0 kb) Puro, BSD GFP, RFP, Luc

6

Lentiviral Tango Expression Vector Set

5'-LTRt-Pack1-CMV-GPCR-tTA-Vp-P2A-Puro--Pack2-3'-LTRt-Amp^R 5'-LTRt-Pack1-tTRE-βLactamase-PGK-Arest2-P2A-BSD-Pack2-3'LTRt-Amp^R
 (size 8.0 kb) (size 9.0 kb)

7

Lentiviral Strep-BioID Expression Vector

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

8

Retroviral cDNA Expression Vector

5'-LTR—MESV pack--eEF1a-ORF-V5—P2A--GFP—WPRE--3'-LTR-PolyA--Amp^R
 (size 7.0 kb)

1 Lentiviral Tet-on Cas9 Expression Vector (all-in-one)

5'-LTRt-Pack1---tTRE—SpCas9-V5—PGK-rtTA-P2A-BSD-Pack2--3'-LTRt-PolyA-Amp^R
 (size 12.5 kb) Bleo

2 Lentiviral Recombinant Antibody Expression Vector

5'-LTRt-Pack1-CMV--HC-scFv-IgG1—PGK-LC-scFv-kappa---- Puro- Pack2--3'-LTRt-PolyA--Amp^R
 (size 8.5 kb) IgG2, IgG3, IgG4 Lambda BSD

3 Lentiviral Fc fusion protein Expression Vector

5'-LTRt-Pack1-CMV--ORF—IgG1-Fc—PGK-GFP-P2A-Puro--Pack2--3'-LTRt-PolyA--Amp^R
 (size 7.5 kb)

4 Lentiviral-CAR-T Expression Vector

5'-LTRt—Pack1--eEF1a--scFv---4-1BBICD-CD3ξ--(PGK-GFP)-(P2A-Puro)--Pack2--3'-LTRt-PolyA-Amp^R
 (size 8.0-8.5 kb) CD28ICD ORF BSD

5 Lentiviral Tet-on Cas9 Knockout Expression Vector Set

Lentiviral Tet-on SpCas9—BSD and Lentiviral hU6-sgRNA—PGK-GFP-P2A-Puro
 Bleo RFP BSD

6 Lentiviral ORF Fusion Expression Vector

5'-LTRt—Pack1--CMV--cDNA-GFP-P2A--Puro--Pack2--3'-LTRt-PolyA--Amp^R
 (size 6.8-9.8 kb) eEF1a RFP, YFP, BFP BSD, Bleo, Hygro

7 Lentiviral Tet-on ORF cDNA Expression Vector (all-in-one) for in vivo

5'-LTRt-Pack1—tTRE--ORF-V5—PGK-rtTA-T2A-Luc-P2A-BSD-Pack2--3'-LTRt-PolyA-Amp^R
 (size 10.8 kb) Gluc Puro

8 Lentiviral Tet-on shRNA Expression Vector (all-in-one) for in vivo

5'-LTRt-Pack1-hU6-TetO--shRNA—PGK-rtTA-T2A-Luc-P2A-BSD--Pack2--3'-LTRt-PolyA--Amp^R
 (size 11.0 kb) Gluc Puro