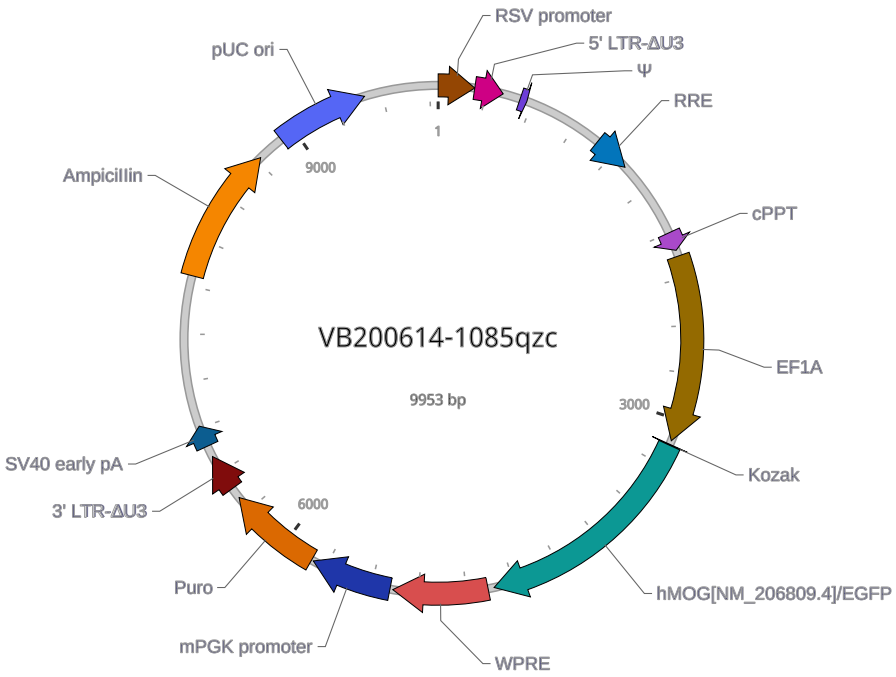
载体基本信息

载体ID vector ID	VB200614-1085qzc
载体名称 name	pLV[Exp]-Puro-EF1A>hMOG[NM_206809.4]/EGFP
载体大小 vector size	9953 bp
病毒基因组大小	6478 bp Viral genome size
载体类型 vector type	哺乳动物基因表达慢病毒载体 Mammalian lentiviral vector
启动子 promoter	EF1A
ORF	hMOG[NM_206809.4]/EGFP
筛选标记 Selection marker	Puro
质粒拷贝数 Copy times	High
载体抗性 Vector resistance	Ampicillin
克隆宿主 closing cost	VB UltraStable （或其他适用菌株）

载体图谱



载体元件

名称 name	位置 position	大小 (bp)	类型 type	描述 discription	应用注释 annotation
RSV promoter	1-229	229	Promoter	Rous sarcoma virus enhancer/promoter	Strong promoter; drives transcription of viral RNA in packaging cells.

名称 name	位置 position	大小 (bp)	类型 type	描述 Discription	应用注释 annotation
5' LTR-ΔU3	230-410	181	LTR	Truncated HIV-1 5' long terminal repeat	Allows transcription of viral RNA and its packaging into virus.
Ψ	521-565	45	Miscellaneous	HIV-1 packaging signal	Allows packaging of viral RNA into virus.
RRE	1075-1308	234	Miscellaneous	HIV-1 Rev response element	Rev protein binding site that allows Rev-dependent nuclear export of viral RNA during viral packaging.
cPPT	1803-1920	118	Miscellaneous	Central polypurine tract	Facilitates the nuclear import of HIV-1 cDNA through a central DNA flap.
EF1A	1959-3137	1179	Promoter	Human eukaryotic translation elongation factor 1 α1 promoter	Strong promoter.
Kozak	3162-3167	6	Miscellaneous	Kozak translation initiation sequence	Facilitates translation initiation of ATG start codon downstream of the Kozak sequence.
hMOG[NM_206809.4]/EGFP	3168-4625	1458	ORF	*None*	*None*
WPRE	4664-5261	598	Miscellaneous	Woodchuck hepatitis virus posttranscriptional regulatory element	Enhances virus stability in packaging cells, leading to higher titer of packaged virus; enhances higher expression of transgenes.
mPGK promoter	5280-5790	511	Promoter	Mouse phosphoglycerate kinase 1 promoter	Medium-strength promoter.

名称	位置	大小 (bp)	类型	描述	应用注释
Puro	5803-6402	600	ORF	Puromycin resistance gene	Allows cells to be resistant to puromycin.
3' LTR-ΔU3	6473-6707	235	LTR	Truncated HIV-1 3' long terminal repeat	Allows packaging of viral RNA into virus; self-inactivates the 5' LTR by a copying mechanism during viral genome integration; contains polyadenylation signal for transcription termination.
SV40 early pA	6780-6914	135	PolyA_signal	Simian virus 40 early polyadenylation signal	Allows transcription termination and polyadenylation of mRNA transcribed by Pol II RNA polymerase.
AmpiciIIin	7868-8728	861	ORF	AmpiciIIin resistance gene	Allows E. coli to be resistant to ampiciIIin.
pUC ori	8899-9487	589	Rep_origin	pUC origin of replication	Facilitates plasmid replication in E. coli; regulates high-copy plasmid number (500-700).

Note: 用户添加的元件以红色粗体表示。

载体序列

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限制性内切酶酶切方案

酶切位点 restriction enzyme cutting site	位置 position	片段 (bp) fragments
XhoI	2925	9953
XmnI	621, 2259, 8056	1638, 5797, 2518
NcoI	3167, 5077, 6982	1910, 1905, 6138
ApaLI	4878, 7984, 9230	3106, 1246, 5601
AflII	294, 2339, 6591	2045, 4252, 3656
ApaLI+XhoI	2925, 4878, 7984, 9230	1953, 3106, 1246, 3648
ApaLI+NcoI	3167, 4878, 5077, 6982, 7984, 9230	1711, 199, 1905, 1002, 1246, 3890
ApaLI+XmnI	621, 2259, 4878, 7984, 8056, 9230	1638, 2619, 3106, 72, 1174, 1344
ApaLI+AflII	294, 2339, 4878, 6591, 7984, 9230	2045, 2539, 1713, 1393, 1246, 1017