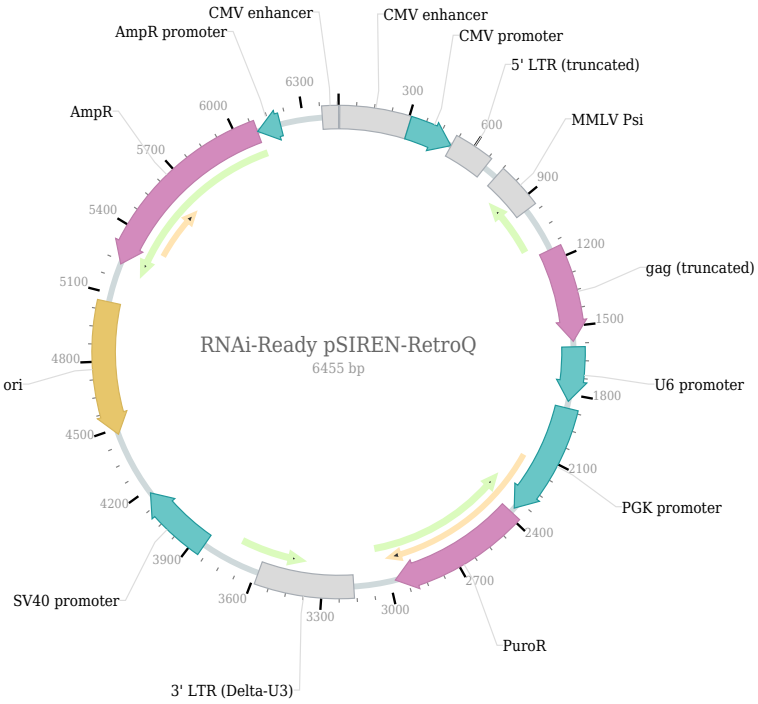
RNAi-Ready pSIREN-RetroQ

载体编号 Vector ID	V012742
抗性 Antibiotic Resistance	Ampicillin
长度 Length	6455 bp
载体类型 Vector Type	RNAi

产品信息

复制子 Replication Origin	ori
来源 Source/Author	Clontech
拷贝数 Copy Number	Low copy number
启动子 Promoter	mPGK
表达方式 Expression Method	Transient
备注 Comment	RNAi-Ready pSIREN-RetroQ is a self-inactivating retroviral expression vector designed to express a small hairpin RNA (shRNA) using the human U6 promoter (PU6; RNA Pol III-dependent). RNAi-Ready pSIREN-RetroQ is provided as a linearized vector digested with BamH I and EcoR I. It is used for targeted gene silencing when an oligonuceotide encoding an appropriate shRNA is ligated into the vector. You can transfect your pSIREN-RetroQ construct as a plasmid expression vector, or—upon transfection into a packaging cell line—this vector can transiently express, or integrate and stably express a viral genomic transcript containing the human U6 promoter and the shRNA. The vector contains a puromycin resistance gene for the selection of stable transfectants. This retroviral vector is optimized to eliminate promoter interference through self-inactivation. The hybrid 5' LTR consists of the cytomegalovirus (CMV) type I enhancer and the mouse sarcoma virus (MSV) promoter. This construct drives high levels of transcription in HEK 293-based packaging cell lines due, in part, to the presence of adenoviral E1A (1–4) in these cells. The self-inactivating feature of the vector is provided by a deletion in the 3' LTR enhancer region (U3). During reverse transcription of the retroviral RNA, the inactivated 3' LTR is copied and replaces the 5' LTR, resulting in inactivation of the 5' LTR CMV enhancer sequences. This may reduce the phenomenon known as promoter interference (5) and allow more efficient expression. Also included in the viral genomic transcript are the necessary viral RNA processing elements including the LTRs, packaging signal (Psi+), and tRNA primer binding site. RNAi-Ready pSIREN-RetroQ also contains a bacterial origin of replication and E. coli Ampr gene for propagation and selection in bacteria.

质粒图谱



复溶方法

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 µl for 5 µg plasmid, and 100 µl for 100 µg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.