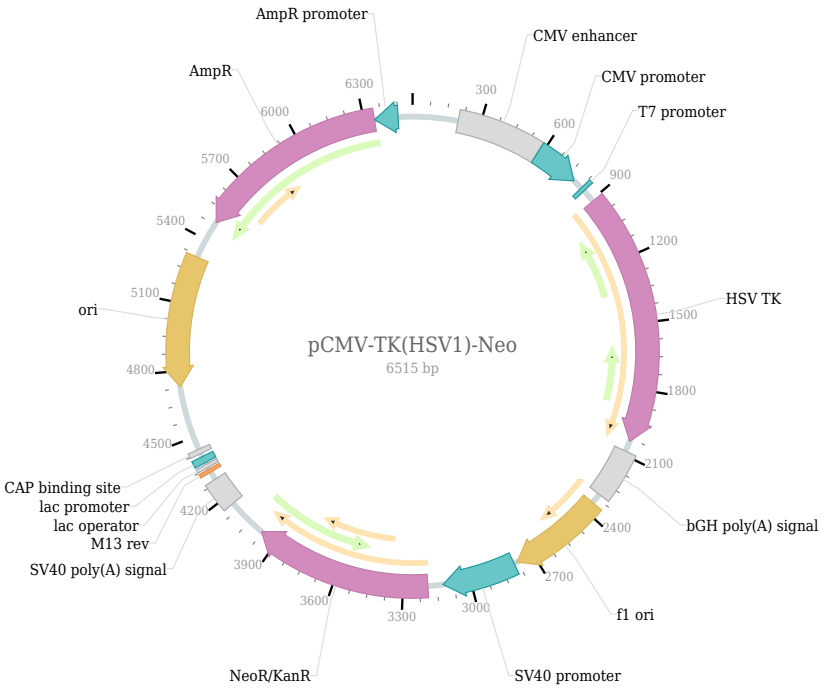
pCMV-TK(HSV1)-Neo

载体编号 Vector ID	V017672
抗性 Antibiotic Resistance	Ampicillin
长度 Length	6515 bp
载体类型 Vector Type	Protein expression
宿主 Host	Mammalian cells

产品信息

复制子 Replication Origin	ori
筛选标记 Selection Marker	Neo/G418
启动子 Promoter	CMV
5'引物 5' Primer	CMV-F
培养菌株 Growth Strain(s)	DH10B
培养温度 Growth Temperature	37℃
备注 Comment	pCMV-TK(HSV1)-Neo is a mammalian expression vector with CMV promoter driving HSV1 thymidine kinase gene, Neo/G418 resistance, for ganciclovir-based cell ablation and suicide gene therapy studies. HSV1-TK (herpes simplex virus type 1 thymidine kinase) serves as a conditional negative-selection suicide marker. Upon ganciclovir (GCV) treatment, HSV1-TK phosphorylates the prodrug GCV into toxic nucleotide analogs that terminate DNA elongation and kill proliferating cells. In targeting vectors, HSV1-TK is placed outside homology arms to eliminate random-integrant clones during positive-negative selection; it can also act as an in-vivo safety switch to ablate engineered cells after GCV administration.

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 ℃.