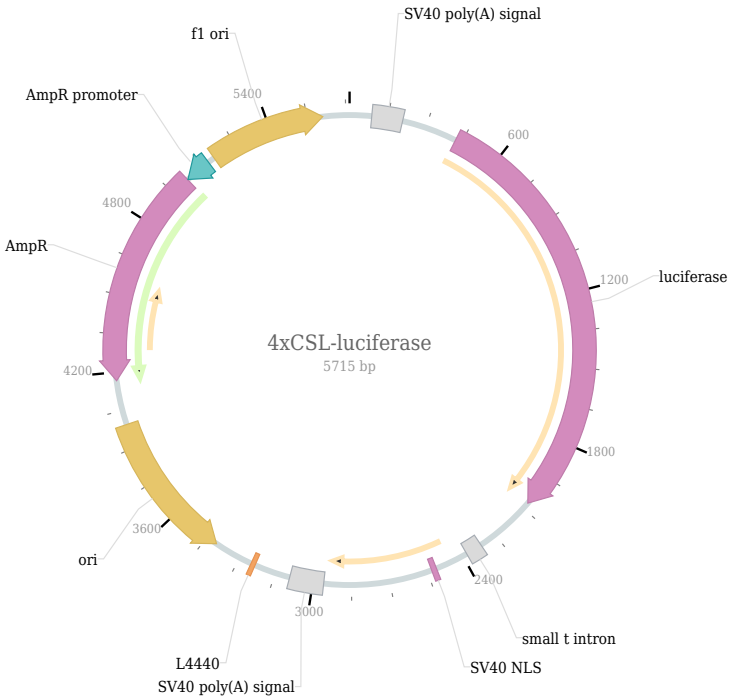
4xCSL-luciferase

载体编号 Vector ID	V006516
抗性 Antibiotic Resistance	Ampicillin
长度 Length	5715 bp
载体类型 Vector Type	Mammalian Expression, Luciferase

产品信息

复制子 Replication Origin	ori
拷贝数 Copy Number	High Copy
克隆方法 Cloning Method	Restriction Enzyme
5' 引物 5' Primer	F1ori-F (GTGGACTCTTGTTCCAAACTGG)
3' 引物 3' Primer	LucNRev
培养菌株 Growth Strain(s)	DH10B
培养温度 Growth Temperature	37℃
备注 Comment	The 4xCSL - luciferase plasmid is an important tool in Notch signaling research. It is constructed from the CBF1/pGL2 - GLO TATA CAT plasmid. A fragment containing multimerized high affinity CSL sites (4 CGTGGGAA) is inserted into a BglII/BamHI - digested RSV - TATA pGL2 vector, which has a TATA box from Rous sarcoma virus to reduce basal luciferase activity. This plasmid is widely used in transfection assays. In experiments, it is often transfected into cells along with Notch constructs and other control plasmids. The luciferase activity of the transfected cells is then measured to assess the activation of CSL - dependent pathways. For example, in studies on murine Notch homologs (N1 - 4), it was used to determine whether truncated Notch proteins could activate a CSL - dependent reporter in the absence of presenilin proteins. The 4xCSL - luciferase plasmid offers several advantages. It provides a specific and sensitive way to study Notch signaling and its regulation of target genes. The presence of multiple CSL sites enhances the detection of CSL - dependent transcriptional activation, allowing for more accurate analysis of the signaling pathway.

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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 ℃.