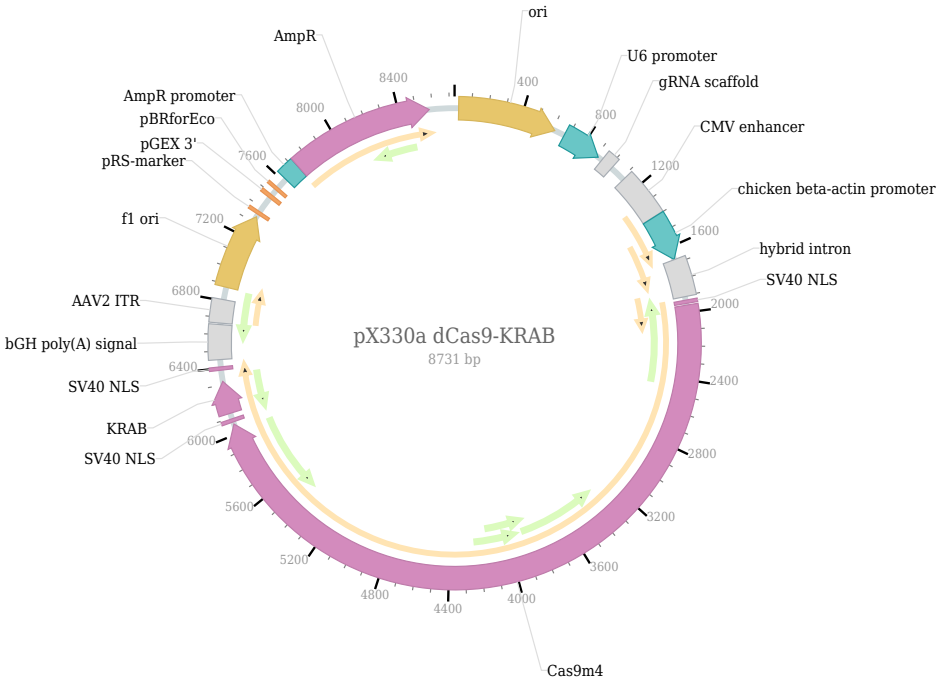
pX330a dCas9-KRAB

载体编号 Vector ID	V012626
抗性 Antibiotic Resistance	Ampicillin
长度 Length	8731 bp
载体类型 Vector Type	Mammalian Expression, CRISPR

产品信息

复制子 Replication Origin	ori
拷贝数 Copy Number	High Copy
启动子 Promoter	CBh
克隆方法 Cloning Method	Gibson Cloning
5' 引物 5' Primer	tctgactgaccgcgttactc
3' 引物 3' Primer	aggaaaggacagtgggagtg
培养菌株 Growth Strain(s)	DH10B
备注 Comment	pX330a dCas9-KRAB is a CRISPR epigenome editing plasmid built from pX330 backbone via In-Fusion cloning of KRAB fragment into linearized pX330-dCas9-LSD1 vector. It ubiquitously expresses catalytically inactive dCas9 fused to KRAB repressor domain under chicken CAG promoter, alongside a U6 sgRNA expression cassette. Guided by tiled sgRNAs, the fusion protein condenses target enhancer chromatin to suppress downstream gene transcription without DNA double-strand breaks. This vector is optimized for in vivo targeted enhancer silencing in early chicken embryos to study neural crest cis-regulatory networks.

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 ℃.