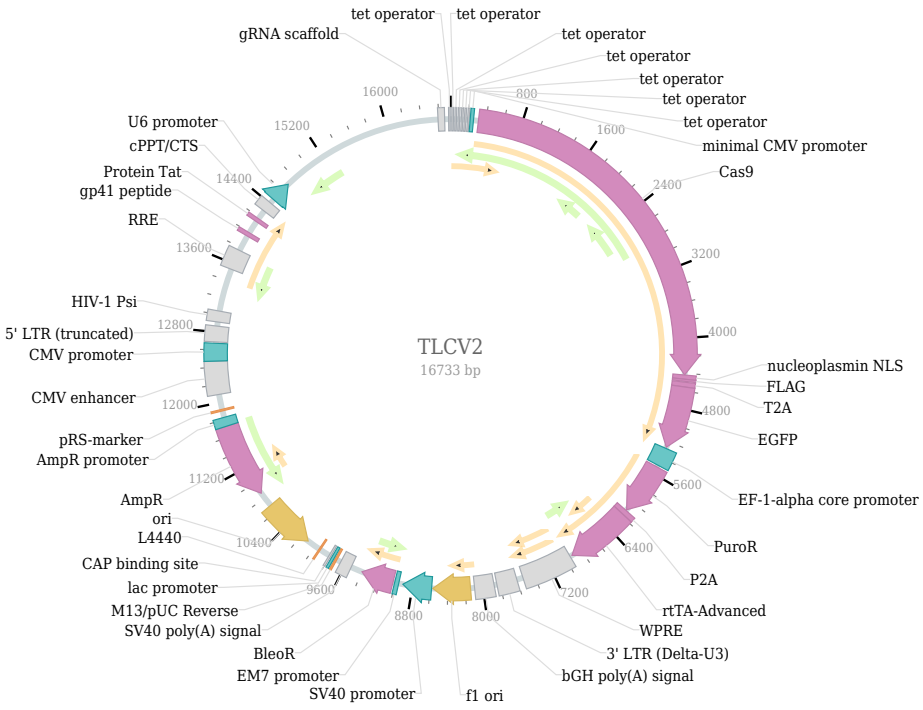
TLCV2

Vector ID	V000856
Antibiotic Resistance	Ampicillin
Length	16733 bp
Vector Type	Mammalian Expression, Lentiviral, CRISPR ; Doxycyc

Product Information

Replication Origin	ori
Selection Marker	Puromycin
Promoter	U6
5' Primer	LNCX [5'-AGCTCGTTTAGTGAACCGTCAGATC-3']
3' Primer	EF1a-R [5'CACGGCGACTACTGCACTTA-3']
Growth Strain(s)	Stbl3
Comment	TLCV2 is an all-in-one doxycycline-inducible lentiviral CRISPR vector modified from lentiCRISPR v2. It tightly controls Cas9 expression via TRE promoter, co-expresses GFP for cell sorting and carries constitutive rtTA and puromycin resistance for stable cell selection. Its U6-driven sgRNA cloning system is compatible with standard CRISPR protocols, and a pre-made TLCV2-RB1 variant targeting human RB1 was used in this FOXM1 study. This plasmid enables reversible, time-controlled gene knockout to avoid long-term constitutive knockout artifacts.

Vector Map



Plasmid Resuspension Protocol

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 ℃.