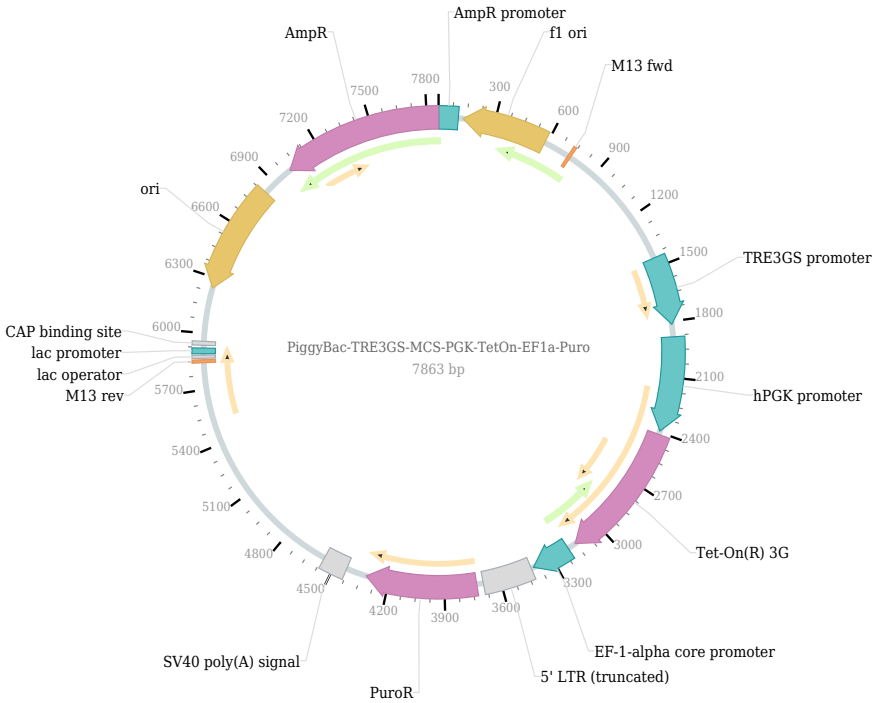
PiggyBac-TRE3GS-MCS-PGK-TetOn-EF1a-Puro

Vector ID	V014163
Antibiotic Resistance	Ampicillin
Length	7863 bp
Vector Type	Protein expression, Transposition
Host	Mammalian cells

Product Information

Replication Origin	ori
Selection Marker	Puro
Promoter	hPGK
Growth Strain(s)	Stbl3
Growth Temperature	37℃
Comment	PiggyBac-TRE3GS-MCS-PGK-TetOn-EF1a-Puro (7.9 kb) is an all-in-one inducible expression system for mammalian cells. It combines the PiggyBac transposon (for genomic integration) with the Tet-On 3G system (for doxycycline-controlled gene expression). The vector features a TRE3GS promoter driving a gene of interest inserted into the MCS, a constitutive hPGK promoter driving the Tet-On 3G transactivator, and an EF-1α core promoter driving PuroR (puromycin resistance). It also includes AmpR for bacterial selection and is designed for generating stable, tightly regulated cell lines with minimal background expression.

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 ℃.