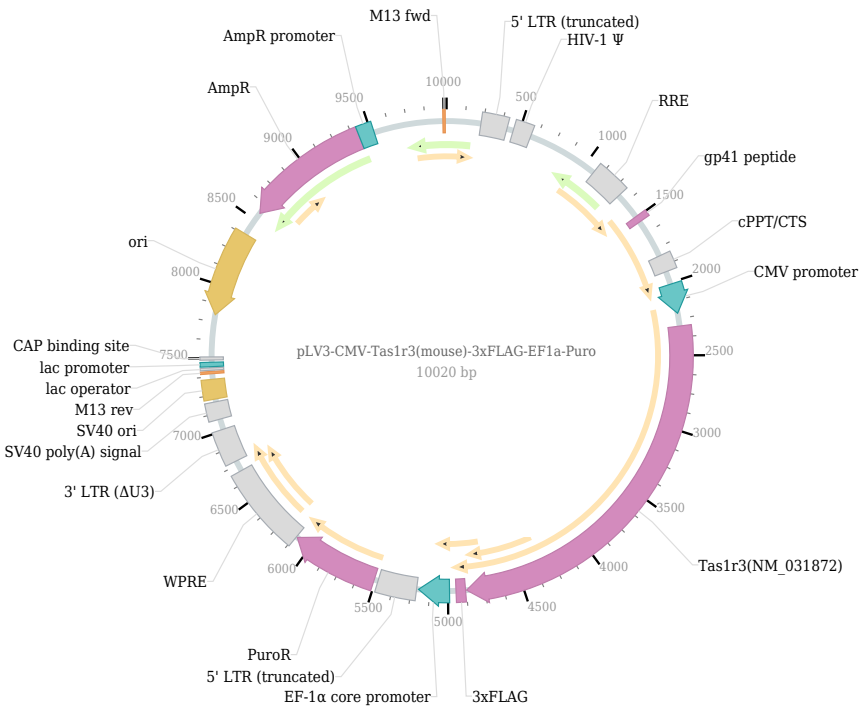
pLV3-CMV-Tas1r3(mouse)-3xFLAG-EF1a-Puro

Vector ID	V025533
Accession ID	NM_031872.2
Antibiotic Resistance	Ampicillin
Length	10020 bp
Vector Type	Protein expression
Host	Mammalian cells, Lentivirus

Product Information

Replication Origin	ori
Selection Marker	Puro
Promoter	CMV
Fusion Tag	3xFLAG
Expression Method	Constiutive, Stable / Transient
Comment	The pLV3-CMV-Tas1r3(mouse)-3xFLAG-EF1a-Puro vector (10020 bp) is a third-generation lentiviral expression system designed for constitutive protein expression in mammalian cells. The primary payload driven by the strong CMV promoter is the full-length mouse Tas1r3gene (NM_031872), which is fused upstream to a 3xFLAG epitope tag for immunological detection and purification. To ensure efficient transcription termination and polyadenylation, a bGH poly(A) signal is placed downstream of the fusion gene. For the selection of stably transduced cells, the vector uses the EF-1-alpha core promoter to drive expression of the PuroR (Puromycin resistance) gene, with a WPRE element to enhance mRNA stability and expression levels. The viral backbone contains all the necessary components for packaging and genome integration, including the HIV-1 Psi packaging signal, the central polypurine tract cPPT/CTS, and the RRE (Rev response element). It features self-inactivating 5' LTR (truncated) and 3' LTR (ΔU3) regions to prevent promoter interference after integration.

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 ℃.