# pLVX-EF1a-IRES-EGFP-Puro

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|---|---|
| **Vector ID** | V013358 |
| **Antibiotic Resistance** | Ampicillin |
| **Length** | 9392 bp |
| **Vector Type** | Protein expression |
| **Host** | Mammalian cells, Lentivirus |

## Product Information

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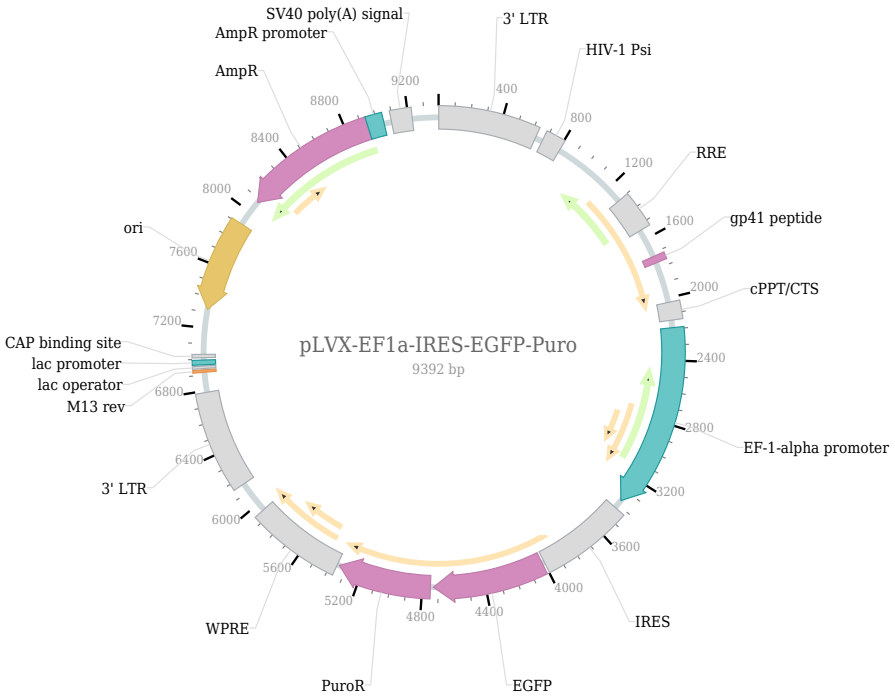
| **Replication Origin** | ori |
| **Selection Marker** | Puro |
| **Promoter** | EF-1α |
| **Growth Strain(s)** | Stbl3 |
| **Growth Temperature** | 37℃ |
| **Comment** | The plasmid vector pLVX-EF1α-IRES-EGFP-Puro is an HIV-1-based lentiviral expression vector. It is designed for high-level, constitutive protein expression in mammalian cells. The EF1α promoter drives a bicistronic transcript where the gene of interest, cloned into the multiple cloning site, and the enhanced green fluorescent protein (EGFP) are co-expressed via an internal ribosome entry site (IRES). The transcript also includes a puromycin resistance gene (PuroR) for selection. Key elements like WPRE and cPPT/CTS enhance viral titer and transduction efficiency. The vector includes an ampicillin resistance gene for bacterial propagation. |

## 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 ℃.