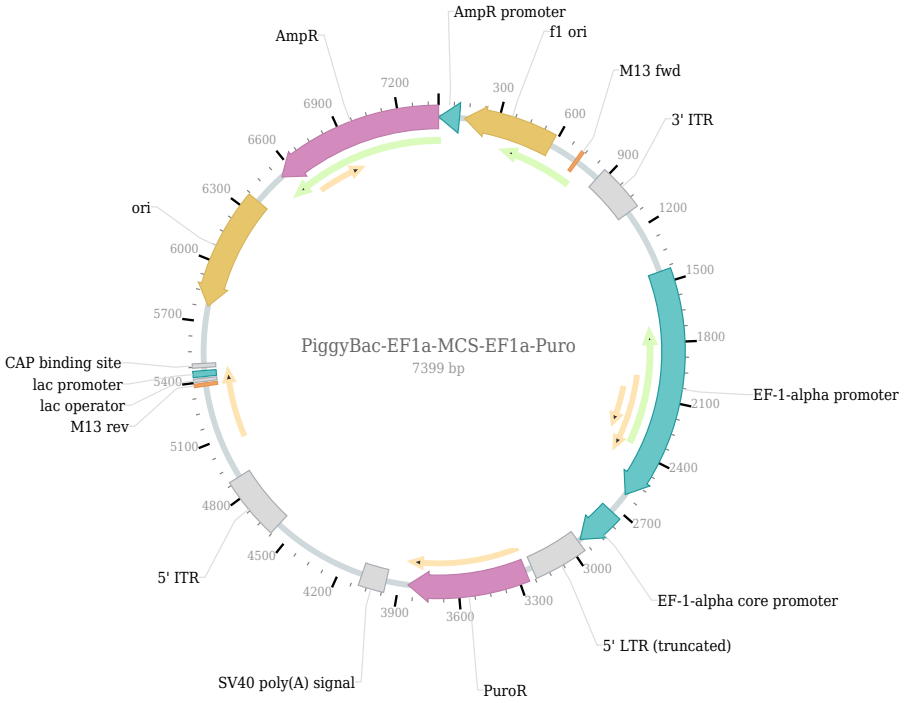
# PiggyBac-EF1a-MCS-EF1a-Puro

| | |
|---|---|
| **Vector ID** | V014710 |
| **Antibiotic Resistance** | Ampicillin |
| **Length** | 7399 bp |
| **Vector Type** | Protein expression, Transposition |
| **Host** | Mammalian cells |

## Product Information

| | |
|---|---|
| **Replication Origin** | ori |
| **Selection Marker** | Puro |
| **Promoter** | EF-1α |
| **Growth Temperature** | 37℃ |
| **Comment** | Core Function: A mammalian expression plasmid designed for stable genomic integration of target genes using the PiggyBac transposon system. Key Components: 1. Promoter: Uses the EF-1α (Elongation Factor 1-alpha) promoter for constitutive, medium-to-high expression in most mammalian cell types 2. Selection Marker: Puromycin resistance gene (PuroR) under the SV40 poly(A) signal, enabling antibiotic selection of stably integrated cells 3. Backbone: Includes an Ampicillin resistance gene (AmpR) and pUC origin 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 ℃.