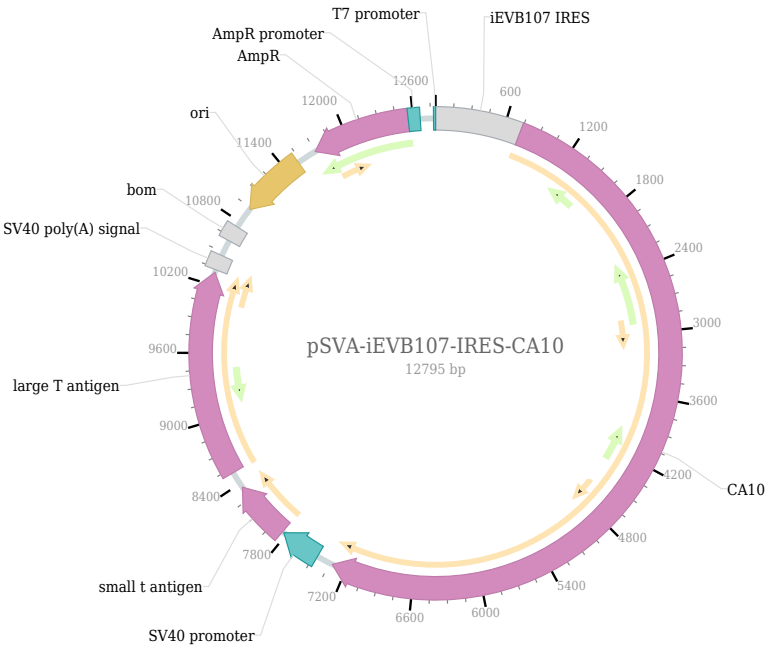
pSVA-iEVB107-IRES-CA10

Vector ID	V017700
Antibiotic Resistance	Ampicillin
Length	12795 bp
Vector Type	Protein expression
Host	Mammalian cells

Product Information

Replication Origin	ori
3' Primer	AmpNR
Growth Strain(s)	JM109
Growth Temperature	37℃
Comment	pSVA-iEVB107-IRES-CA10 is a pSVA-backbone vector featuring T7 and SV40 promoters, SV40 poly(A) signal, and pUC ori. Carries an enterovirus cassette linking the EV-B107 IRES (iEVB107, a robust type 1 IRES) to a coxsackievirus A10 (CA10) sequence for viral RNA expression and rescue studies in mammalian cells. iEV-B107-IRES is a type-1 picornaviral internal ribosome entry site derived from Enterovirus B107, identified via high-throughput screening for circRNA-based protein expression. It exhibits stronger cap-independent translation in circular RNA backbones than the benchmark iCVB3 IRES, yet its activity drops sharply in linear RNA contexts. As a full-length ~750-nt element, it cannot be truncated without losing translational potency and serves as a promising candidate tool for circRNA therapeutic engineering.

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 ℃.