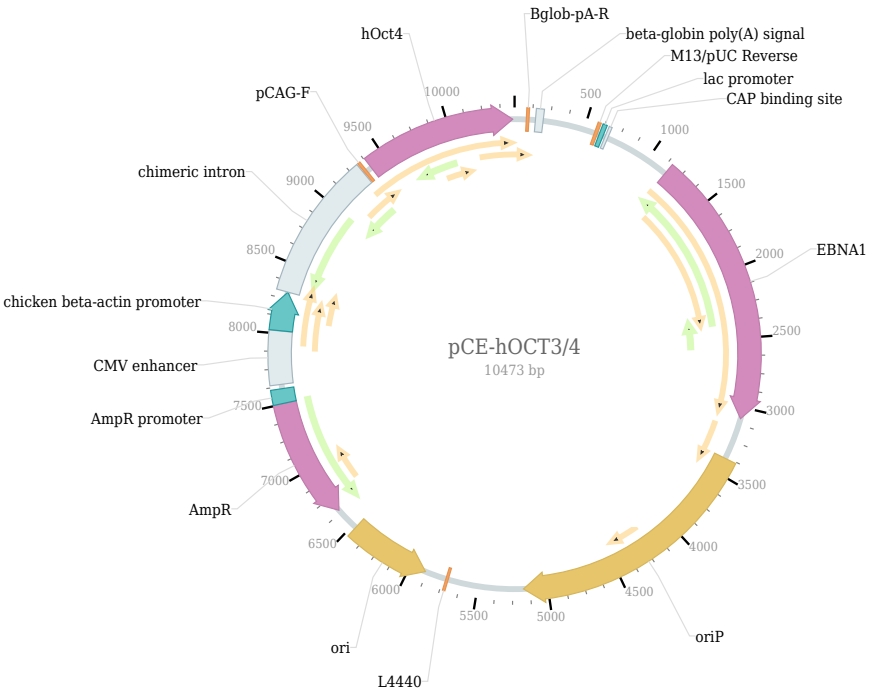
pCE-hOCT3/4

Vector ID	V001386
Antibiotic Resistance	Ampicillin
Length	10473 bp
Vector Type	Mammalian Expression

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	CAG
Cloning Method	Restriction Enzyme
5' Primer	pCAG-F
3' Primer	TTAGCCAGAAGTCAGATGCTC
Growth Strain(s)	DH5a
Comment	pCE-hOCT3/4 is an EBV-based non-integrating episomal plasmid developed by Okita and Yamanaka's lab. It drives ectopic expression of human core pluripotency factor OCT3/4 via the CAG promoter for somatic cell reprogramming. This vector belongs to the Y4 episomal cocktail, used to generate integration-free iPSCs from cord blood and peripheral blood mononuclear cells. Its OriP-EBNA1 backbone enables transient plasmid replication in human cells without genomic insertion after reprogramming.

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 ℃.