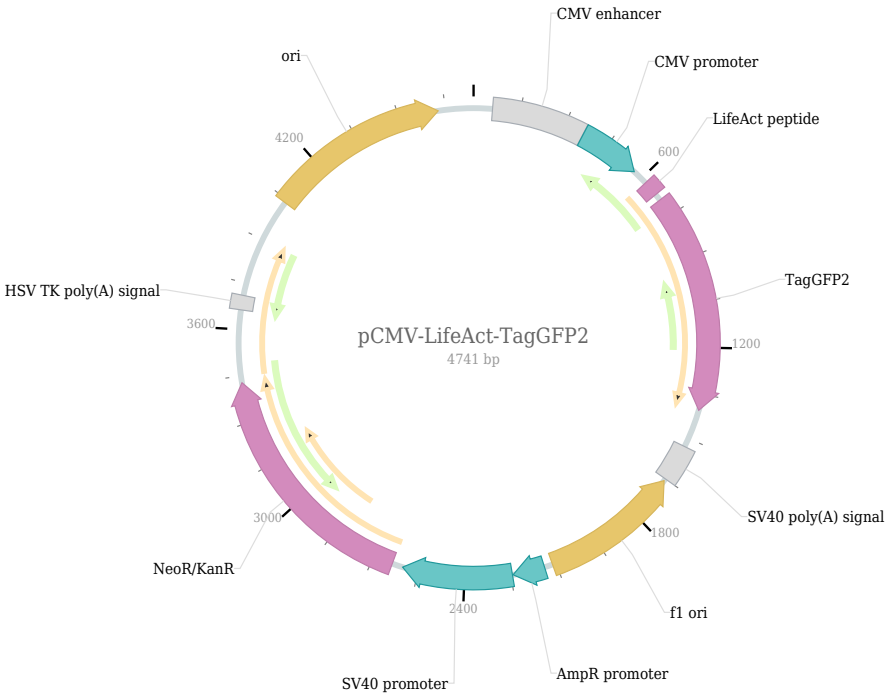
pCMV-LifeAct-TagGFP2

Vector ID	V015179
Antibiotic Resistance	Kanamycin
Length	4741 bp
Vector Type	Protein expression
Host	Mammalian cells

Product Information

Replication Origin	ori
Selection Marker	Neo/G418
Promoter	CMV
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pCMV-LifeAct-TagGFP2 is a mammalian expression vector with CMV promoter, LifeAct peptide fused with TagGFP2 green fluorescent protein for specific labeling of F-actin, for live-cell actin cytoskeleton imaging and dynamics studies. LifeAct is a 17-amino-acid peptide(MGVADLIKKFESISKEE) derived from yeast Abp140, which preferentially binds filamentous actin (F-actin) over G-actin. Genetically fused to fluorescent proteins (e.g., tdTomato, GFP), it enables live-cell visualization of actin cytoskeleton dynamics. Its small size minimizes cytoskeleton perturbation, though high expression may induce artifacts.

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 ℃.