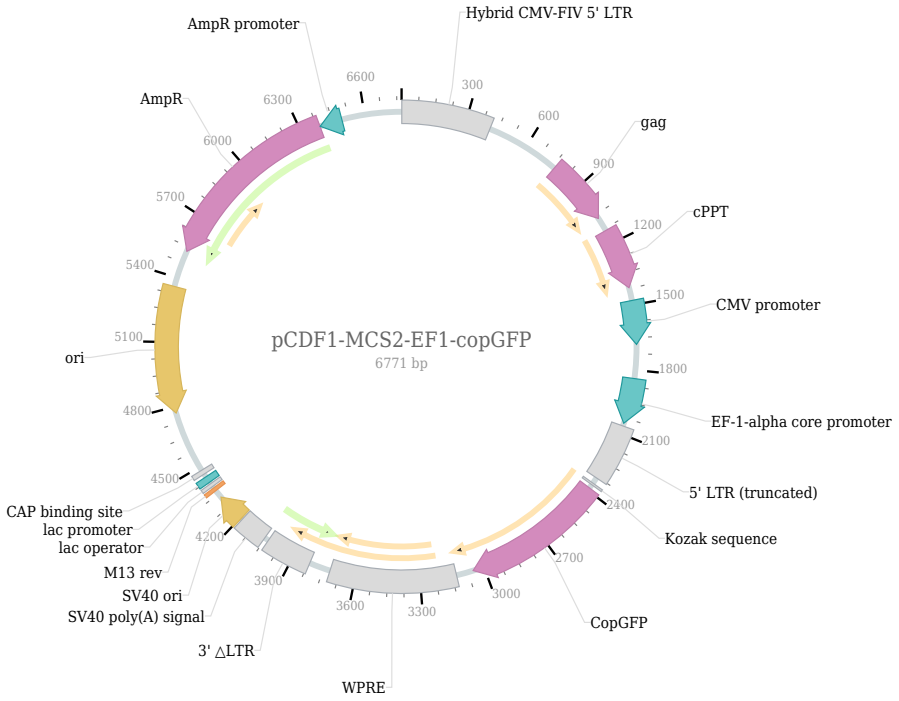
pCDF1-MCS2-EF1-copGFP

Vector ID	V010100
Antibiotic Resistance	Ampicillin
Length	6771 bp
Vector Type	Lentiviral vectors

Product Information

Replication Origin	ori
Promoter	EF-1α core
Cloning Method	Enzyme digestion and ligation
5' Primer	LNCX: AGCTCGTTTAGTGAACCGTCAGATC
3' Primer	EF1a-R: TTTCGCCCTAACTTCGTGAT
Fusion Tag	copGFP
Comment	The pCDF1-MCS2-EF1-copGFP Vector contains the full-length copGFP gene with optimized human codons for high level of expression of the fluorescent protein from the CMV promoter in mammalian cells. The copGFP marker is a novel natural green monomeric GFP-like protein from copepod (Pontellina sp.). The copGFP protein is a non-toxic, non-aggregating protein with fast protein maturation, high stability at a wide range of pH (pH 4-12), and does not require any additional cofactors or substrates. The copGFP protein has very bright fluorescence that exceeds at least 1.3 times the brightness of EGFP, the widely used Aequorea victoria GFP mutant. The copGFP protein emits green fluorescence with the following characteristics:emission wavelength max – 502 nm; excitation wavelength max – 482 nm; quantum yield – 0.6; extinction coefficient – 70,000 M-1 cm-1

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 ℃.