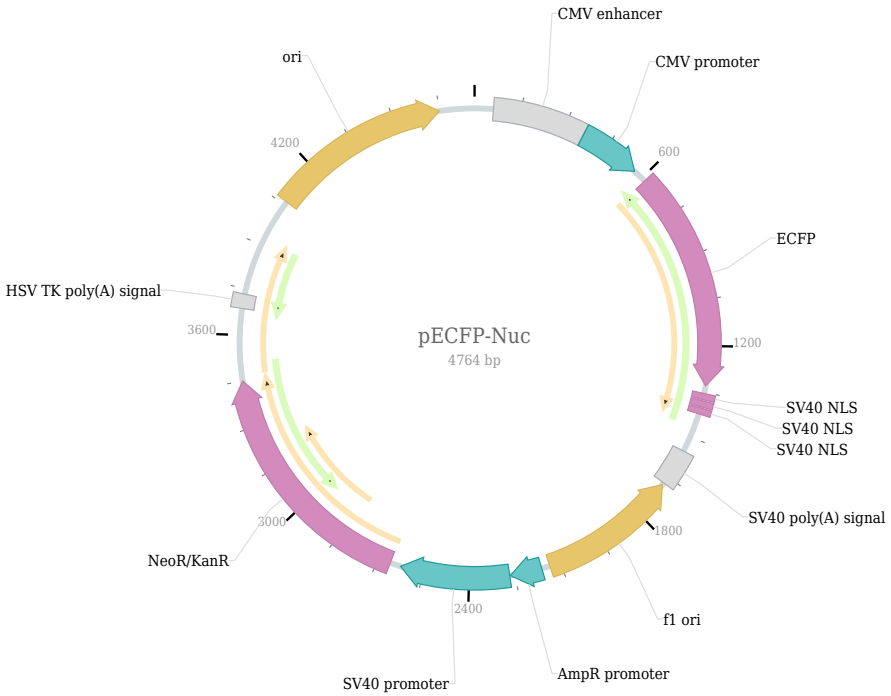
pECFP-Nuc

Vector ID	V012409
Antibiotic Resistance	Kanamycin
Length	4764 bp
Vector Type	Fluorescent Protein Reporter Vectors

Product Information

Replication Origin	ori
Selection Marker	Neomycin
Promoter	CMV
Fusion Tag	ECFP
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The pECFP-Nuc vector encodes an enhanced cyan fluorescent protein (ECFP) targeted to the nucleus of mammalian cells via three copies of a nuclear localization signal (NLS), ensuring efficient nuclear translocation. This ECFP variant features optimized excitation (major peak at 433 nm) and emission (major peak at 475 nm) spectra, along with mutations that enhance its brightness and solubility . The vector contains a neomycin resistance gene for selection in eukaryotic cells using G418 and an SV40 origin for replication. It is primarily used to visualize the nucleus in living or fixed cells via fluorescence microscopy and is suitable for dual-labeling experiments with yellow fluorescent proteins like EYFP.

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 ℃.