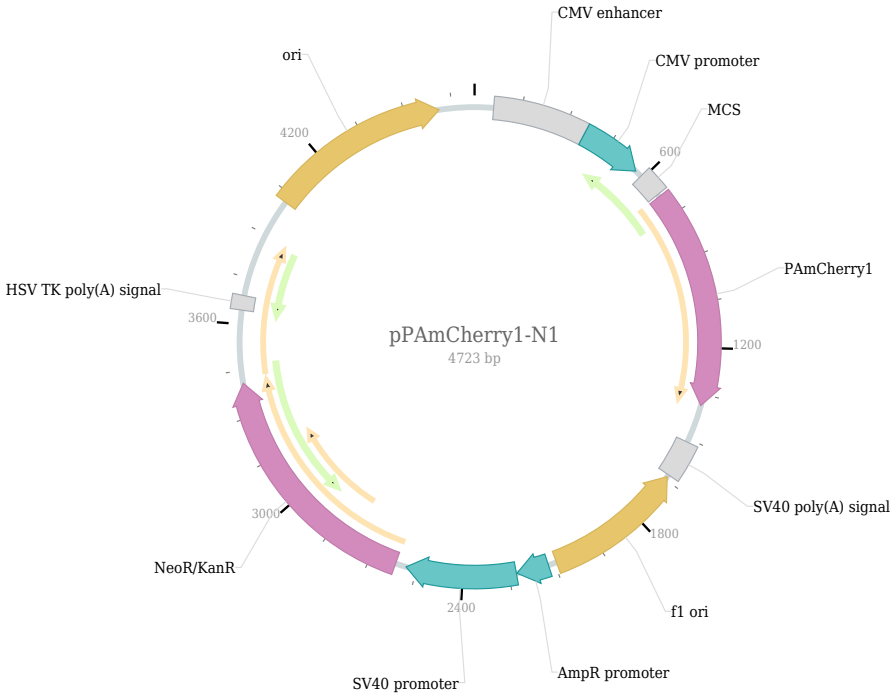
pPAmCherry1-N1

Vector ID	V011950
Antibiotic Resistance	Kanamycin
Length	4723 bp
Vector Type	Fluorescent Protein Genes & Plasmids

Product Information

Replication Origin	ori
Source/Author	Verkhusha Lab
Selection Marker	Neomycin/G418(Geneticin)
Copy Number	High copy number
Comment	pPAmCherry1-N1 is a mammalian expression plasmid modified from the pEGFP-N1 backbone, carrying the irreversibly photoactivatable red fluorescent protein PAmCherry1 reported in the 2009 Nature Methods paper. Genes inserted into its multiple cloning site form N-terminal fusions with PAmCherry1, tagging target proteins at their C-terminus for cell imaging. PAmCherry1 stays non-fluorescent until activated by 350–400 nm violet light, with post-activation excitation/emission peaks at 564/595 nm, ideal for two-color PALM super-resolution microscopy paired with green photoactivatable FPs like PAGFP. It bears kanamycin resistance for bacterial propagation and neomycin resistance (G418 selection) to generate stable mammalian cell lines for live or fixed-cell single-molecule localization studies.

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 ℃.