# pCMV-mCherry-sfGFP-Neo

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|---|---|
| **Vector ID** | V014801 |
| **Antibiotic Resistance** | Kanamycin |
| **Length** | 5439 bp |
| **Vector Type** | Protein expression |
| **Host** | Mammalian cells |

## Product Information

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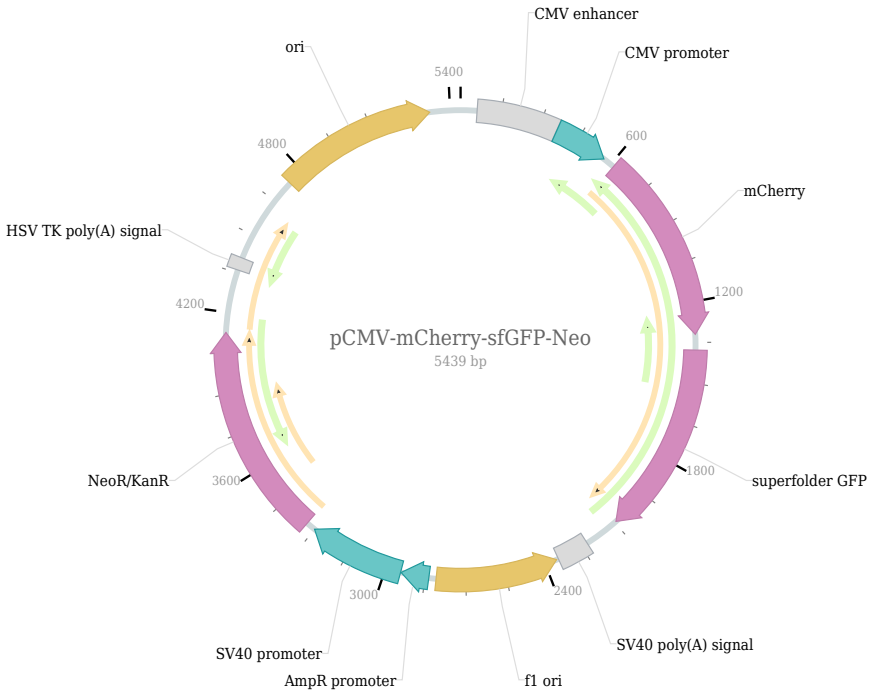
| **Replication Origin** | ori |
| **Selection Marker** | Neo/G418 |
| **Promoter** | CMV |
| **5' Primer** | CMV-F |
| **Growth Strain(s)** | DH10B |
| **Growth Temperature** | 37℃ |
| **Comment** | This CMV-driven backbone vector encodes mCherry followed by a multiple-cloning-site (MCS) and sfGFP. Target open reading frames (without stop codon) are inserted into MCS to generate mCherry-POI-sfGFP fusion protein. Taking advantage of pH-dependent quenching of sfGFP while mCherry remains stable under acidic conditions, the mCherry/sfGFP fluorescence ratio reports lysosomal delivery, protein turnover or membrane-protein topology. |

## 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 ℃.