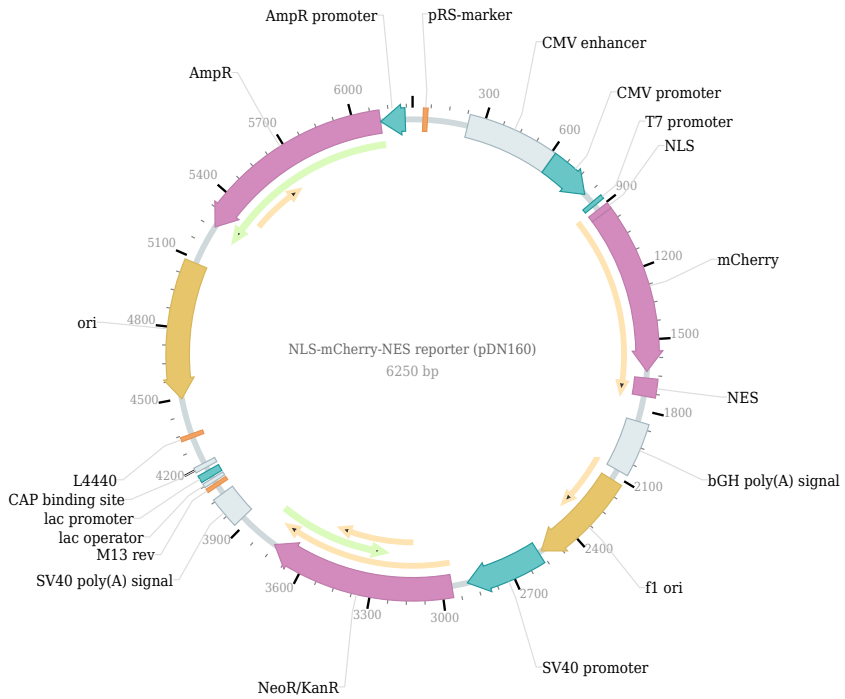
NLS-mCherry-NES reporter (pDN160)

Vector ID	V007267
Antibiotic Resistance	Ampicillin
Length	6250 bp
Vector Type	Mammalian Expression

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	CMV
5' Primer	CMV-F
3' Primer	BGH-rev
Growth Strain(s)	DH10B
Comment	pDN160 is a constitutive fluorescent reporter plasmid constructed by deleting the AsLOV2 domain from pDN118. It encodes a fusion protein consisting of a weak cMyc P1A NLS, mCherry, and a strong truncated human PKIα-derived PKIt NES linked by flexible GGS repeats. Without light regulation, its fusion protein mainly resides in cytoplasm due to the dominant PKIt NES. Co-expressed with chromatin-tethered H2B-GFP-LEXY, it visualizes CRM1 sequestration and light-induced nuclear export inhibition via increased nuclear mCherry signal. This reporter quantitatively measures endogenous CRM1-dependent nuclear export activity in live mammalian cells.

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 ℃.