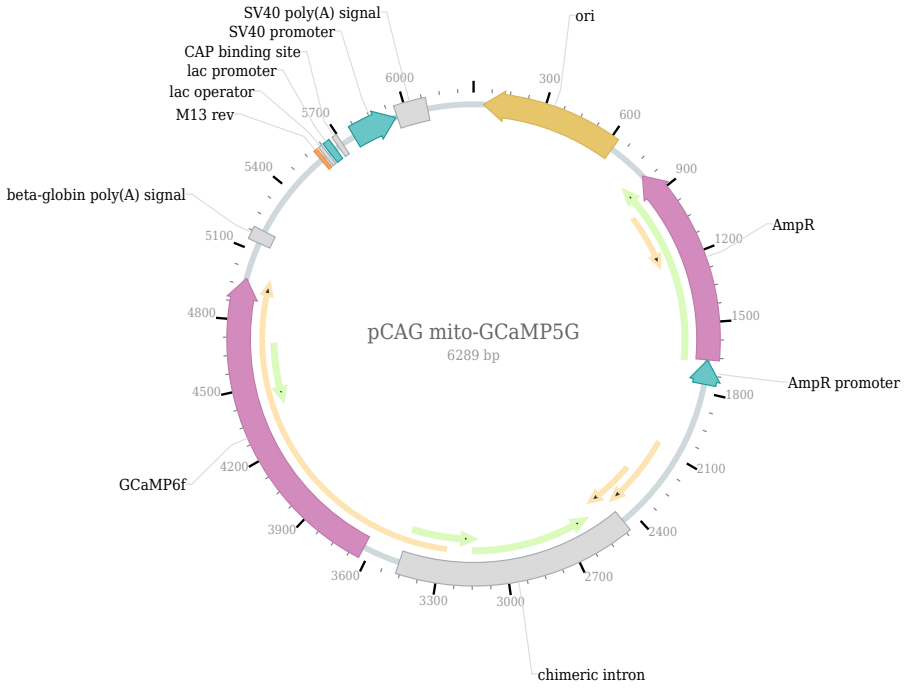
pCAG mito-GCaMP5G

Vector ID	V017287
Antibiotic Resistance	Ampicillin
Length	6289 bp
Vector Type	Gene expression
Host	Mammalian cells

Product Information

Replication Origin	ori
Promoter	CAG
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pCAG mito-GCaMP5G is a mammalian expression plasmid using the CAG promoter to drive mitochondria-targeted GCaMP5G, a genetically encoded calcium sensor for live-cell imaging of intramitochondrial Ca^{2+} dynamics in neurons and other cell types.

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 ℃.