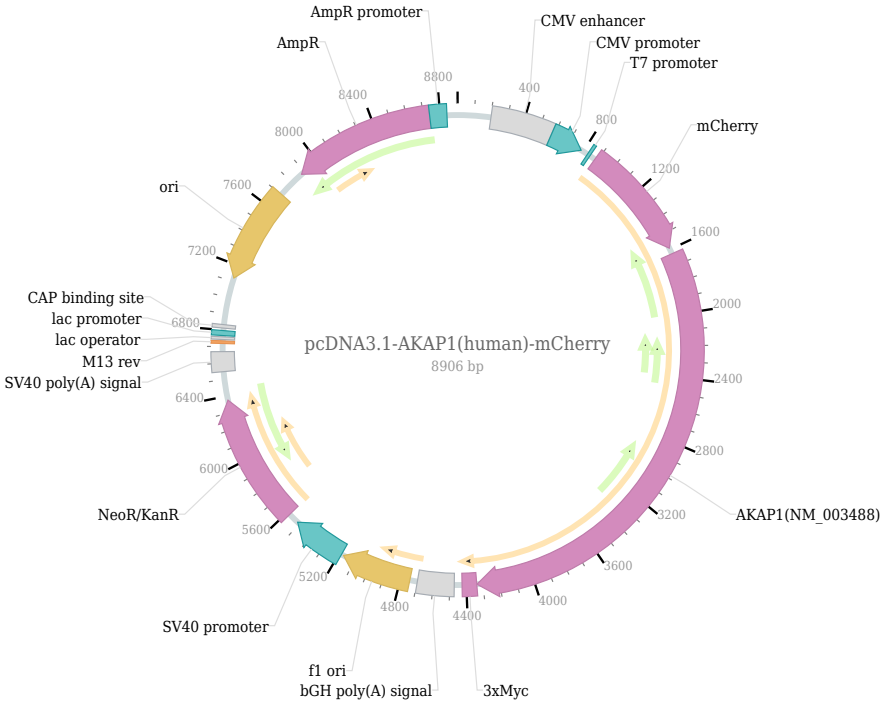
pcDNA3.1-AKAP1(human)-mCherry

Vector ID	V040452
Accession ID	NM_003488.4
Antibiotic Resistance	Ampicillin
Length	8906 bp
Vector Type	Protein expression
Host	Mammalian cells

Product Information

Replication Origin	ori
Selection Marker	Neo/G418;mCherry
Copy Number	High
Promoter	CMV
5' Primer	MCHERRY-F
Fusion Tag	mCherry
Growth Strain(s)	DH5a
Growth Temperature	37℃
Expression Method	Transient
Comment	pcDNA3.1-AKAP1(human)-mCherry (8.9 kb) is a mammalian expression vector for visualizing the subcellular localization of human AKAP1 (A-kinase anchoring protein 1, also known as AKAP121 or D-AKAP1). A CMV promoter drives expression of the full-length AKAP1 coding sequence (NM_003488) fused with a C-terminal mCherry (red fluorescent protein) for real-time imaging of mitochondrial targeting, as AKAP1 contains a mitochondrial localization sequence (MLS) that directs it to the outer mitochondrial membrane (OMM). The vector also includes 3xMyc tags for detection, NeoR/KanR (G418 resistance) for stable selection, AmpR for bacterial selection, pUC ori, f1 ori, SV40 promoter/poly(A), bGH poly(A), and M13 priming sites.

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 ℃.