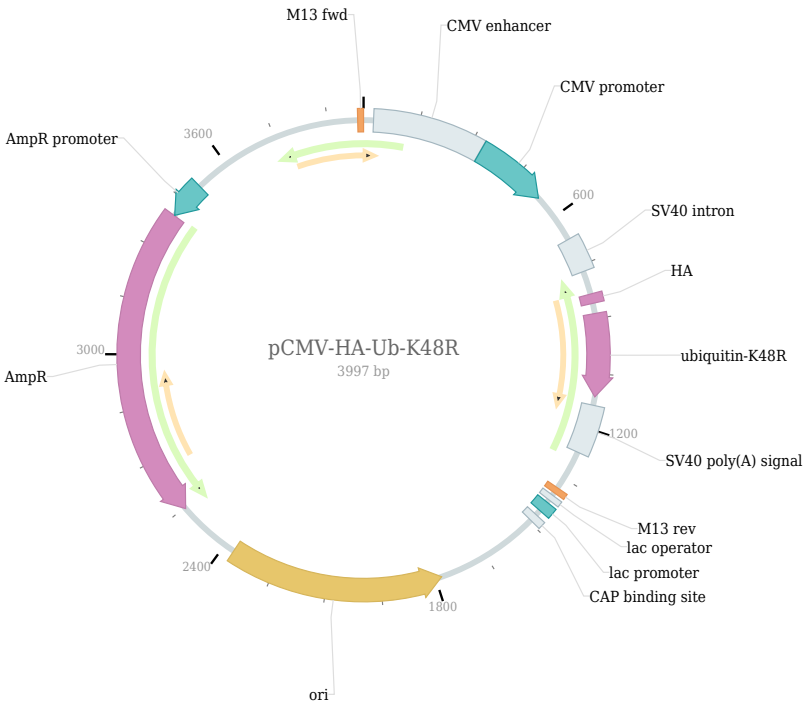
pCMV-HA-Ub-K48R

Vector ID	V015194
Antibiotic Resistance	Ampicillin
Length	3997 bp
Vector Type	Protein expression
Host	Mammalian cells

Product Information

Replication Origin	ori
Promoter	CMV
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The pCMV-HA-Ub-K48R is a mammalian expression plasmid designed for ubiquitination studies. It uses the CMV promoter to drive expression of an N-terminal HA-tagged ubiquitin mutant where lysine 48 is mutated to arginine (K48R). This mutation specifically inhibits the formation of K48-linked polyubiquitin chains, which are primarily associated with targeting proteins for proteasomal degradation. The plasmid includes an SV40 poly(A) signal for mRNA stability and an ampicillin resistance gene (AmpR) for bacterial selection in hosts like DH5α. It is widely used to investigate proteasome-independent roles of ubiquitination.

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 ℃.