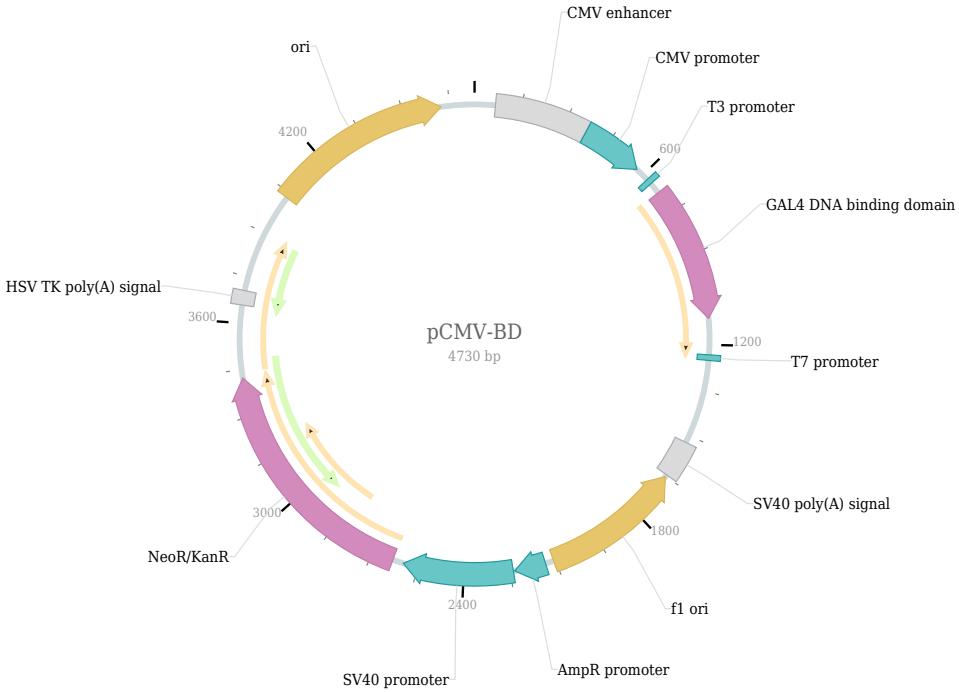
pCMV-BD

Vector ID	V009104
Antibiotic Resistance	Kanamycin
Length	4730 bp
Vector Type	Mammalian Two-Hybrid System

Product Information

Replication Origin	ori
Selection Marker	Neomycin
Copy Number	High copy number
Promoter	CMV
Fusion Tag	Gal4-DBD
Comment	The pCMV-BD and pCMV-AD vectors are designed for the construction and expression of gene fusions with the GAL4 DNA binding domain and NF-κB transcriptional activation domain, respectively. The pCMV-BD vector contains DNA encoding amino acids 1–147 of the GAL4 gene (DNA binding domain)2 and unique 3′ cloning sites. It is used for the construction of bait plasmids containing a DNA insert encoding a bait protein. The pCMV-AD vector contains DNA encoding the nuclear localization sequence (NLS) from SV40 large T-antigen (PKKKRKV), amino acids 364–550 of the mouse NF-κB gene (transcriptional activation domain)3 and unique 3′ cloning sites. It is used for constructing a target plasmid containing a DNA insert encoding the interacting proteins. Both pCMV-BD and pCMV-AD contain the pUC origin for replication in E. coli. The pCMV-BD vector contains the kanamycin-resistance gene and the pCMV-AD vector contains the ampicillin-resistance gene. The constitutively-active cytomegalovirus (CMV) promoter governs the expression of the bait and target proteins in the pCMV-BD and pCMV-AD vectors. The SV40 poly (A) provide the signals necessary for transcriptional termination and polyadenylation of the bait and target genes in 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 ℃.