

pCMV-Gag-Pol Retroviral Vector

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CATALOG #
AAA11418

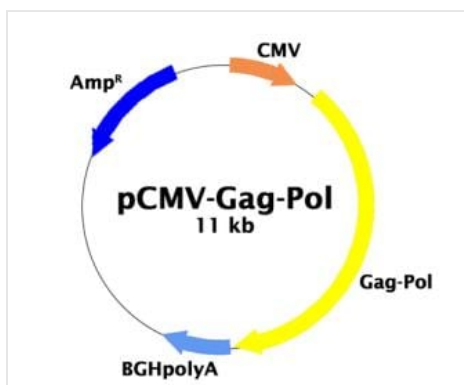
PRODUCT SYNONYMS

pCMV-Gag-Pol; pCMV-Gag-Pol Retroviral Vector; pCMV-Gag-Pol Vector; pCMV-Gag-Pol retroviral vector

PRODUCT SPECIFICATIONS

Form/Format	10 ug at 0.25 ug/uL in TE
Plasmid Digestion	Single digestion: XbaI or SacII Double digestion: NotI and XbaI yield 7.2 kb and 3.5 kb
Safety Consideration	Remember that you will be working with samples containing infectious virus. Follow the recommended NIH guidelines for all materials containing BSL-2 organisms. Always wear gloves , use filtered tips and work under a biosafety hood.
Preparation and Storage	Store at -20°C.

IMAGES



Application Data

The pCMV-Gag-Pol vector contains the ampicillin-resistance gene for propagation and antibiotic selection in bacteria (Figure 1). Figure 1. Schematic representation of pCMV-Gag-Pol vector.

ADDITIONAL INFORMATION

Related Product Information for pCMV-Gag-Pol retroviral vector	Retroviruses are efficient tools for delivering heritable genes into the genome of dividing cells. Moloney Murine Leukemia Virus (MMLV)-based retroviral vector system is the most commonly used gene transfer vehicle. pCMV-Gag-Pol expresses the retroviral structure proteins under the control of the CMV immediate-early promoter. The gag region encodes genes which comprise the capsid proteins; the pol region encodes the reverse transcriptase and integrase proteins. Retrovirus can be produced using one of the following methods: 1) Transfection of a retrovirus packaging cell line with a retrovirus expression vector. Packaging cell lines usually stably express gag, pol and env genes. For example, transfection of Plat-E packaging cell line (MBS169333) with a pMXs vector would produce an ecotropic retrovirus. 2) Cotransfection of a host cell with plasmids containing LTRs, Gag, Pol, Env. For example, cotransfection of 293RTV (MBS169332) with pMXs, pCMV-Gag-Pol (MBS168500) and pCMV-VSV-G (MBS168028) would produce VSVG-pseudotyped retrovirus. Note: We recommend cotransfection of expression vector:gag-pol vector: envelope vector at the following plasmid ratios: (a) For ecotropic or amphotropic retrovirus, 3:1:1 (b) For VSVG-pseudotyped retrovirus, 3:1:0.5
Product Categories/Family for pCMV-Gag-Pol retroviral vector	Viral Expression ; Retroviral Expression ; Retroviral Expression and Packaging ; Retroviral Packaging Vectors
References	1. Miller, A. D. & Baltimore, C. (1986) Mol. Cell. Biol. 6:2895-2902. 2. Mann, R., Mulligan, R. C. and Baltimore, D. (1983) Cell 33:153-159. 3. Morita, S., Kojim, T., and Kitamura, T. (2000) Gene Therapy 7: 1063-1066. Okamoto, K. et al. (2012). Dengue Virus Strain DEN2 16681 Utilizes a Specific Glycochain of Syndecan-2 Proteoglycan as a Receptor. J.Gen. Virol. 93:761-770.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.