

pCMV-VSV-G Envelope Vector

CATALOG NUMBER: RV-110

STORAGE: -20°C

QUANTITY AND CONCENTRATION: 10 µg at 0.25 µg/µL in TE

Background

Retroviruses are efficient tools for delivering heritable genes into the genome of dividing cells. pCMV-VSV-G expresses the G glycoprotein of the vesicular stomatitis virus (VSV-G) under the control of the CMV immediate-early promoter. VSV-G is used in pseudotyping of Moloney Murine Leukemia Virus (MMLV)-based retroviral vectors by mediating viral entry. VSV-G interacts with phospholipid components of the target cell membrane and fosters the fusion of viral and cellular membranes. VSV-G does not require a cell surface receptor and can serve as a surrogate viral envelope protein. The vector contains the ampicillin-resistance gene for propagation and antibiotic selection in bacteria (Figure 1).

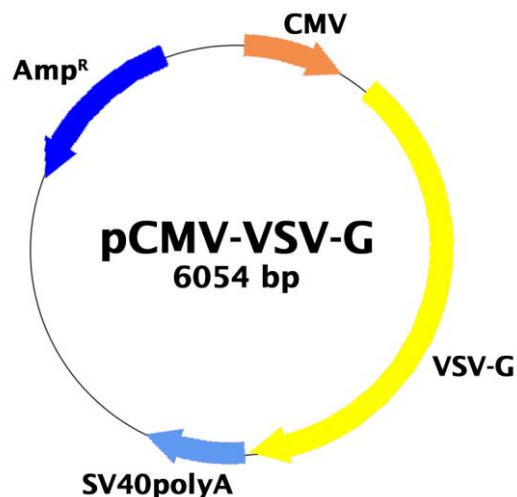


Figure 1. Schematic representation of pCMV-VSV-G envelope vector.

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.

References

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Recent Product Citations

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3. Zhang, T. et al. (2015). Homoharringtonine binds to and increases myosin-9 in myeloid leukemia. *Br J Pharmacol*. doi:10.1111/bph.13359.
4. Amagai, Y. et al. (2015). A point mutation in the extracellular domain of KIT promotes tumorigenesis of mast cells via ligand-independent auto-dimerization. *Sci Rep.* **5**:9775.
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6. Gallaher, Z. R. et al. (2014). Neural proliferation in the dorsal root ganglia of the adult rat following capsaicin-induced neuronal death. *J Comp Neurol.* **522**:3295-3307.
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9. Higuchi, A. et al. (2014). Preparation of induced pluripotent stem cells on dishes grafted on oligopeptide under feeder-free conditions. *J Taiwan Inst Chem E.* **45**:295-301.
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12. Oida, T. et al. (2010). Overexpression of TGF- β ₁ gene induces cell surface localized glucose-regulated protein 78-associated latency-associated peptide/TGF- β . *J. Immunol.* **185**:3529-3535.

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