

pCMV-Eco Envelope Vector

CATALOG NUMBER: RV-112

STORAGE: -80°C

QUANTITY AND CONCENTRATION: 100 µL of bacterial glycerol stock

Background

Retroviruses are efficient tools for delivering heritable genes into the genome of dividing cells. The ecotropic, amphotropic and 10A1 envelope proteins are all natural MMLV variants, and are all relatively labile and thus considered relatively safe compared with other viral systems such as VSVG. Retrovirus expressing different envelope proteins can have different host cell ranges (see Table 1).

	Eco	Ampho	10A1	VSVG
Human	–	+	+	+
Mouse	+	+	+	+
Rat	+	+	+	+
Hamster	–	+/-	+	+
Mink	–	+	+	+
Cat	–	+	+	+
Dog	–	+	+	+
Monkey	–	+	+	+
Avian	-	-	-	+
Fish	-	-	-	+
Insect	-	-	-	+

Table 1. Host cell range of virus pseudotyped with different envelope proteins.

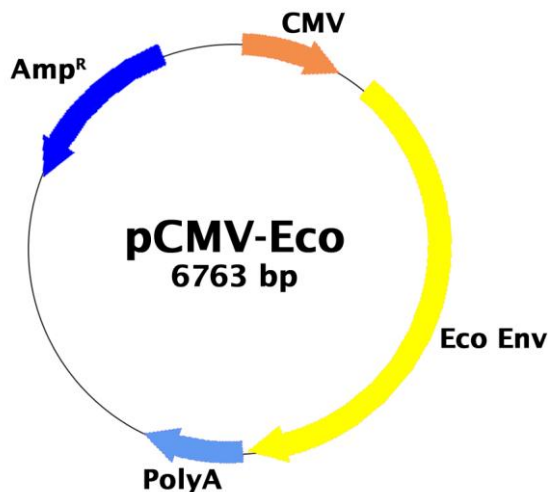


Figure 1. Schematic representation of pCMV-Eco envelope vector.

pCMV-Eco expresses the ecotropic envelope protein under the control of the CMV immediate-early promoter. The vector contains the ampicillin-resistance gene for propagation and antibiotic selection in bacteria (Figure 1).

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

1. Emi, N., *et al.*, (1991) *J. Virol.* **65**, 1202-1207.

Recent Product Citations

1. Fu, R.Y. et al (2020). CD4+ T Cells Engineered with FVIII-CAR and Murine Foxp3 Suppress Anti-Factor VIII Immune Responses in Hemophilia A Mice. *Cell Immunol.* doi: 10.1016/j.cellimm.2020.104216.
2. Walia, M.K. et al. (2018). Tolerance to sustained activation of the cAMP/Creb pathway activity in osteoblastic cells is enabled by loss of p53. *Cell Death Dis.* **9**(9):844. doi: 10.1038/s41419-018-0944-8.
3. Ng, A. J. et al. (2015). The DNA helicase Recq14 is required for normal osteoblast expansion and osteosarcoma formation. *PLoS Genet.* **10**:e1005160.

Warranty

These products are warranted to perform as described in their labeling and in Cell Biolabs literature when used in accordance with their instructions. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THIS EXPRESSED WARRANTY AND CELL BIOLABS DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR PARTICULAR PURPOSE. CELL BIOLABS's sole obligation and purchaser's exclusive remedy for breach of this warranty shall be, at the option of CELL BIOLABS, to repair or replace the products. In no event shall CELL BIOLABS be liable for any proximate, incidental or consequential damages in connection with the products.

This product is for RESEARCH USE ONLY; not for use in diagnostic procedures.

Contact Information

Cell Biolabs, Inc.
7758 Arjons Drive
San Diego, CA 92126
Worldwide: +1 858-271-6500
USA Toll-Free: 1-888-CBL-0505
E-mail: tech@cellbiolabs.com
www.cellbiolabs.com

©2009-2020: Cell Biolabs, Inc. - All rights reserved. No part of these works may be reproduced in any form without permissions in writing.