



pBABE-GFP Retroviral Vector

CATALOG NUMBER: RTV-002 STORAGE: -20°C

QUANTITY AND CONCENTRATION: 10 µg at 0.5 µg/µL in TE

Background

Retroviruses are efficient tools for delivering heritable genes into the genome of dividing cells. Cell Biolabs' GFP retroviral vector is based on the pBABE vector system, which is derived from Moloney murine leukemia virus (MMLV). The vector provides the viral package signal, transcription and processing elements, and a target gene. The viral env gene, produced by the package cell line, encodes the envelop protein, which determines the viral infectivity range. Transfection into a package cell line produces high-titer, replication-incompetent viruses. In addition to transfer and expression of exogenous genes in mammalian cells, recently, retroviruses are used to express silencing RNAs (siRNA) to decrease the expression of target genes both in vitro and in vivo.

The vector contains the bacterial origin of replication, ampicillin-resistance gene, and GFP gene useful for FACS sorting of stable clones of infected mammalian cells.

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 glove, use filtered tips and work under a biosafety hood.

References

1. Morgenstern, J. P. and H Land. (1990) Nuc. Acid Res. 18, 3587-3596.
2. Coffin, J. M. and H. E. Varmus, Retroviruses, Cold Spring Harbor Press, NY.
3. Schuck S, Manninen A, Honsho M, Fullekrug J and Simons K. (2004) Proc Natl Acad Sci U SA.101, 4912-4917.

Warranty

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