



Multiple Lentiviral Expression (MuLE) System Kit

Description: The MuLE (Multiple Lentiviral Expression) system facilitates the simultaneous introduction of multiple genetic alterations into mammalian cells. The MuLE system allows simple and rapid MultiSite Gateway recombination-based cloning of complex polycistronic lentiviruses containing up to five different genetic expression elements. These vectors can induce combinatorial constitutive or inducible gene overexpression, knockdown (shRNA, miR-30-shRNA), mutation/editing (CRISPR-Cas9) or deletion (Cre), together with expression of fluorescent or enzymatic reporters for cellular assays and animal imaging studies. The ability to simultaneously alter multiple genes via infection with a single ecotropic or amphotropic MuLE lentivirus provides significant genetic power and allows high throughput genetic modulation studies in mammalian cells and tissues. More information can be found at:

www.addgene.org/kits/mule-system

Reference: A versatile modular vector system for rapid combinatorial mammalian genetics.

Albers J, Danzer C, Rechsteiner M, Lehmann H, Brandt LP, Hejhal T, Catalano A, Busenhardt P, Gonçalves AF, Brandt S, Bode PK, Bode-Lesniewska B, Wild PJ, Frew IJ. *J Clin Invest*. 2015 Apr 1;125(4):1603-19. doi: 10.1172/JCI79743. Epub 2015 Mar 9. (PubMed ID: 25751063).

Handling and Storage: Store glycerol stocks at -80°C and minimize freeze-thaw cycles. To access a plasmid, keep the plate on dry ice to prevent thawing. Using a sterile pipette tip, puncture the seal above an individual well and spread a portion of the glycerol stock onto an agar plate. To patch the hole, use sterile tape or a portion of a fresh aluminum seal.

Note: These plasmid constructs are being distributed to non-profit institutions for the purpose of basic research.

Please contact Addgene at help@addgene.org with any questions.