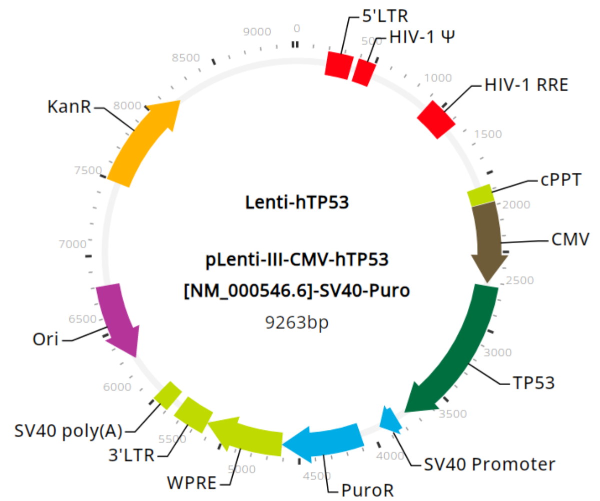
Genome-Wide Lentiviral Expression Library

Human, Mouse & Rat Gene Expression Vectors & Viruses

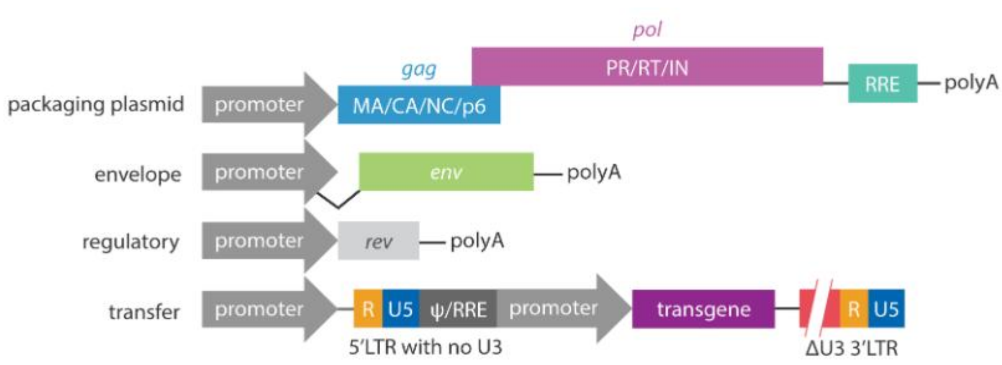
High-Performance Lentiviral Vectors for Every Gene of Interest

abm offers a comprehensive collection of human, mouse, and rat genes cloned into ready-to-use lentiviral vectors or supplied as packaged recombinant lentivirus for efficient gene over-expression studies. The collection includes many therapeutically relevant gene targets such as TP53, KRAS, EGFR, IL6, and TNF-a, supporting a wide range of biomedical research applications. The vectors are compatible with Third Generation lentiviral systems (see below) and engineered for robust, stable expression using the CMV promoter and WPRE. Each vector also contains a puromycin resistance cassette for rapid and reliable selection of transduced cells. Trusted by researchers worldwide, **abm**'s lentiviral tools have been successfully applied in peer-reviewed studies, including publications in high-impact journals such as *Nature*. Together, **abm**'s lentiviral over-expression tools deliver a reliable, high-performance solution for accelerating discovery from basic research to translational applications.



Versatile by Design: Advantages of the Lentivirus Platform

Feature	Advantages
Cell Type Tropism	Broad: dividing and non-dividing cells, including primary and difficult to transfect cells
Genome Integration	Integrates into genome, enables stable, long-term and heritable expression
Transduction Efficiency	High with reproducible expression
Cargo Capacity	Large capacity ~4-5 kb transgene (~9 kb total)
Scalable Production	High titer capable with well-established production workflows
In vivo Compatibility	Widely used for long-term expression in animal models
Technology	Well-characterized with regulatory familiarity



Third Generation Lentivirus System

Four plasmids are required for lentivirus production:

1. Packaging Plasmid containing structural proteins Gag and Pol.
2. Envelope Plasmid containing transmembrane glycoprotein VSV-G.
3. Packaging Plasmid containing structural protein Rev.
4. **Transfer Plasmid containing your Gene of Interest (utilize abm's Lentiviral Expression Library products)**

Format	Product	Concentration	Quantity
Lentiviral Vector	(Gene of Interest) Lentiviral Vector	100 ng/μl	1.0 μg
Lentivirus	(Gene of Interest) Lentivirus	10^8 IU/ml	3 x 250 μl
		10^9 IU/ml	4 x 100 μl
		10^{10} IU/ml	10 x 50 μl

Learn more about our genome-wide expression collection at: https://www.abmgood.com/Lentivirus-System.html

Top Publications

Cat. No.	Publication	Journal	Year
LC119058	Bergin, C. J., Zouggar, A., Mendes da Silva, A., Fenouil, T., Haebe, J. R., Masibag, A. N., Agrawal, G., Shah, M. S., Sandouka, T., Tiberi, M., Auer, R. C., Ardolino, M., & Benoit, Y. D. (2024). The dopamine transporter antagonist vanoxerine inhibits G9a and suppresses cancer stem cell functions in colon tumors. Nature Cancer. https://doi.org/10.1038/s43018-024-00727-y	Nature Cancer	2024
LC411847	Li, J., Lan, Z., Liao, W. et al. Histone demethylase KDM5D upregulation drives sex differences in colon cancer. Nature 619, 632–639 (2023). https://doi.org/10.1038/s41586-023-06254-7	Nature	2023
LC145697	Oh, Y. M., Lee, S. W., Kim, W. K., Chen, S., Church, V. A., Cates, K., ... & Yoo, A. S. (2022). Age-related Huntington's disease progression modeled in directly reprogrammed patient-derived striatal neurons highlights impaired autophagy. Nature Neuroscience, 25(11), 1420-1433. https://doi.org/10.1038/s41593-022-01185-4	Nature Neuroscience	2022
LC124141	Wu, K., Feng, J., Lyu, F., Xing, F., Sharma, S., Liu, Y., Wu, S.-Y., Zhao, D., Tyagi, A., Deshpande, R. P., Pei, X., Ruiz, M. G., Takahashi, H., Tsuzuki, S., Kimura, T., Mo, Y.-Y., Shiozawa, Y., Singh, R., & Watabe, K. (2021). Exosomal miR-19a and IBSP cooperate to induce osteolytic bone metastasis of estrogen receptor-positive breast cancer. Nature Communications, 12(1), 5196. https://doi.org/10.1038/s41467-021-25473-y	Nature Communications	2021
LC123960	Jin, Y., Li, C., Xu, D., Zhu, J., Wei, S., Zhong, A., Sheng, M., Duarte, S., Coito, A. J., Busuttil, R. W., Xia, Q., Kupiec-Weglinski, J. W., & Ke, B. (2020). Jagged1-mediated myeloid Notch1 signaling activates HSF1/Snail and controls NLRP3 inflammasome activation in liver inflammatory injury. Cellular & Molecular Immunology, 17(12), 1245–1256. https://doi.org/10.1038/s41423-019-0318-x	Cellular & Molecular Immunology	2020
LC524885	De Boeck, A., Ahn, B. Y., D'Mello, C., Lun, X., Menon, S. V., Alshehri, M. M., Szulzewsky, F., Shen, Y., Khan, L., Dang, N. H., Reichardt, E., Goring, K. A., King, J., Grisdale, C. J., Grinshtein, N., Hambardzumyan, D., Reilly, K. M., Blough, M. D., Cairncross, J. G., Yong, V. W., ... Senger, D. L. (2020). Glioma-derived IL-33 orchestrates an inflammatory brain tumor microenvironment that accelerates glioma progression. Nature Communications, 11(1), 4997. https://doi.org/10.1038/s41467-020-18569-4	Nature Communications	2020

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