

MINICIRCLE CLONING & PRODUCTION SERVICES

SPEED UP YOUR SCIENCE WITH SBI'S HIGH-QUALITY CUSTOM SERVICES

SYSTEMBIO.COM/MINICIRCLE-SERVICES

HIGHLIGHTS

- **Access Minicircle Technology for research use with no licensing restrictions when ordering ready-to-use minicircle DNA through our production service**
- **Choose either vector design and construction or our full end-to-end minicircle production service**
- **Leverage the minicircle platform for durable gene expression in your most demanding applications**
- **Accomplish more with a turn-around time of only 4 weeks for the end-to-end service**
- **Get the amount of highly purified minicircle DNA you need (produced on demand) for any project large or small—from 250 µg up to 10 mg**
- **Rest easy with your project in the hands of our experienced team that routinely produces minicircles for large pharma partners**
- **Enjoy consistent quality, confidentiality, and on-time delivery with all projects completed on-site in our Palo Alto, CA, facility**

Accelerate *in vivo* gene expression studies

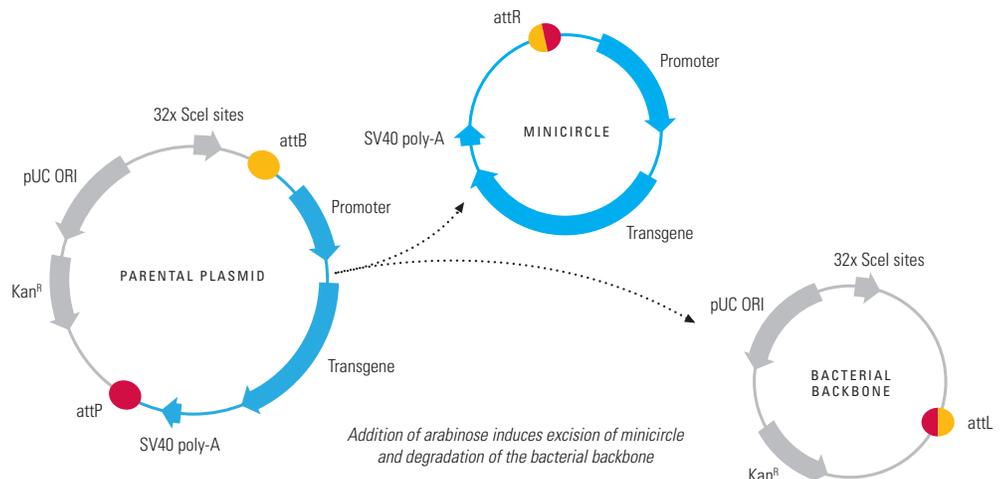
When you want sustained transgene expression without introducing any exogenous DNA sequences—such as for model animal and gene therapy development—Minicircle Technology is a great option. But many labs don't have the time or expertise to spend constructing and producing minicircles. Which is why SBI offers Minicircle Cloning & Production Services.

Delivered by our experienced scientific team, our Minicircle Services are highly flexible and can include a complete end-to-end experience where we clone your cDNA, miRNA, or shRNA into one of our highly-regarded minicircle parental vectors and produce large quantities of minicircles, or you can choose to have us conduct only parts of the cloning and production process. We can even customize the parental vector for you.

Take advantage of our Minicircle Cloning & Production Services today—email us at services@systembio.com

More about minicircles—lasting, episomal gene expression

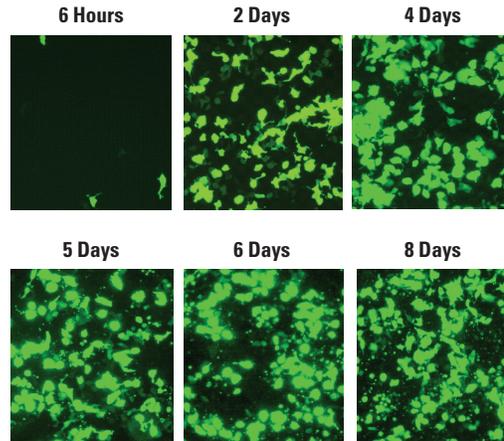
Produced as small circular DNA fragments excised from a parental plasmid, the non-viral, episomal Minicircle expression cassette is free of any bacterial plasmid DNA sequences that can lead to silencing, and comes with a variety of promoter and reporter combinations. Their small size facilitates more efficient transfection than what's possible with standard-sized plasmids, and, while minicircles do not replicate with the host cell, expression lasts for 14 days or longer in dividing cells, and can continue for months in non-dividing cells.



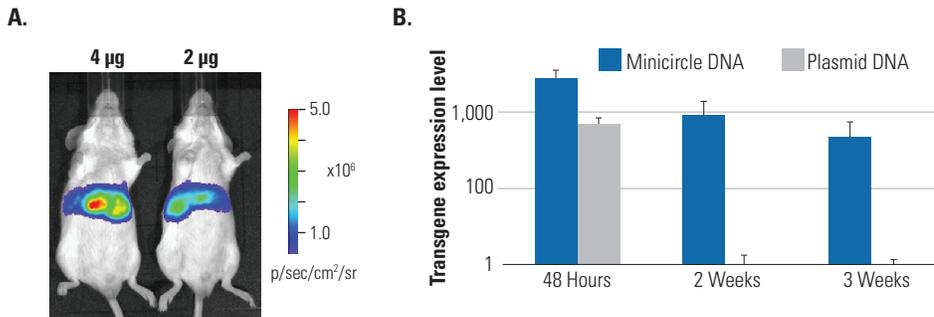
System Biosciences
Harnessing innovation to drive discoveries

Achieve sustained expression after transfection *in vitro* and *in vivo*

Easy, sustained transfection in most cell types. Transfection of 1 μg of minicircle DNA (pMC.CMV-MCS-EF1-GFP-SV40PolyA, Cat.# MN511A-1) into HEK293 cells delivers over one week of robust gene expression.



Express transgenes for weeks in animal models. (A) Hydrodynamic tail vein injection of 2 μg and 4 μg of minicircle DNA (CMV-GFP-Luc) into mice shows excellent expression after 48 hours. (B) Minicircle-delivered transgenes retain robust expression that can last for weeks compared to transgenes that are delivered using plasmid DNA, where expression is rapidly lost. In this study, 40 μg of minicircle DNA was introduced into mice via hydrodynamic tail vein injection.



A trusted minicircle production partner for large pharma companies

With a highly experienced scientific team, many labs—including those at large pharma companies—turn to SBI for minicircle cloning and production. With years of experience with successful project completion, we are industry leaders in the field. Because all aspects of this service are completed on-site in our Palo Alto, CA, facility, we can offer complete confidentiality, transparency on project status, and fully-informed, expert technical support.

Building the tools that speed your research

With an eye on the latest advances, SBI finds promising technology and converts it into easy-to-use tools and robust services. Our Minicircle Services are just one example. See what other ways SBI can drive your research forward—visit us at systembio.com.

Get more information

about our Minicircle

Services or receive

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consultation about your

project—email

services@systembio.com