

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Method for expressing large genes in cardiomyocytes	<p>A method for expressing large genes in cardiomyocytes could be useful for creating new models and assays. It is challenging to use conventional viral vectors to transfect cells with genes larger than 6 kb because of limits in the vector's packaging capacity. The new method, called split-intein protein transsplicing, involves splitting the sequence that encodes a large protein into two smaller parts that incorporate an intein, which is a protein-splicing element that promotes the joining of two polypeptide fragments. In human cardiomyocytes, adenovirus-mediated transduction of two halves of the 6.6 kb calcium channel L-type α_1c subunit resulted in expression of the full-length subunit and functional L-type calcium channels. Next steps include testing the method with other large proteins.</p> <p>SciBX 6(39); doi:10.1038/scibx.2013.1106 Published online Oct. 10, 2013</p>	Unpatented; available for licensing	<p>Subramanyam, P. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 3, 2013; doi:10.1073/pnas.1308161110 Contact: Henry M. Colecraft, Columbia University, New York, N.Y. e-mail: hc2405@columbia.edu</p>