This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Label-free electrochemical detection of methyltransferases	<p>A label-free electrochemical system for detecting methyltransferases could help distinguish tumor tissue from normal tissue without the use of radioactive or fluorescent probes. The multiplexed detection system used a substrate plate containing a 15-electrode array and a complementary patterning and detection plate containing another 15-electrode array for high-sensitivity, selective measurement of DNA (cytosine-5-)-methyltransferase 1 (DNMT1) activity. In cell culture lysates prepared from biopsies from patients with colorectal carcinoma, the system detected higher levels of DNMT1 activity in carcinoma tissue than in the surrounding normal tissue. Next steps include testing whether incorporation of microfluidics technology into the system could decrease the sample sizes needed for detection.</p> <p>SciBX 7(41); doi:10.1038/scibx.2014.1212 Published online Oct. 23, 2014</p>	Patent pending; available for licensing	<p>Furst, A.L. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 6, 2014; doi:10.1073/pnas.1417351111</p> <p>Contact: Jacqueline K. Barton, California Institute of Technology, Pasadena, Calif. e-mail: jkbarton@caltech.edu</p>