This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Phlorizin-pretreated mice with streptozotocin-induced diabetes as models of diabetic nephropathy	Phlorizin pretreatment in mice with streptozotocin-induced diabetes make them useful as models to help identify new treatments for diabetic nephropathy. In mice, high doses of streptozotocin induce diabetes but also cause acute kidney injury (AKI), which makes the mice unsuitable as models of diabetic nephropathy. In the kidneys of mice given a high dose of streptozotocin, AKI markers were associated with downregulation of solute carrier family 2 facilitated glucose transporter member 2 (Slc2a2; Glut2). In mouse models of streptozotocin-induced diabetes, pretreatment with the competitive sodium-glucose cotransporter 2 (SGLT2) inhibitor phlorizin increased Glut2 levels and decreased both renal uptake of streptozotocin and consequent AKI compared with vehicle pretreatment. Next steps could include confirming that the mice develop diabetic nephropathy and using them to evaluate therapeutic candidates.	Unpatented; unlicensed	Brouwers, B. <i>et al. J. Biol. Chem.</i> ; published online Aug. 11, 2013; doi:10.1074/jbc.M113.469486 Contact: Jeroen Declercq, Catholic University Leuven, Leuven, Belgium e-mail: jeroen.declercq@med.kuleuven.be
SciBX 6(36); doi:10.1038/scibx.2013.1010 Published online Sept. 19, 2013			