This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
<i>Drosophila</i> cancer models to identify inhibitors that block an optimized combination of kinase targets	<p>Screening in <i>Drosophila</i> cancer models could aid the identification of inhibitors against an optimized combination of kinase targets. In a <i>Drosophila</i> model of multiple endocrine neoplasia type 2 (MEN2), a disease caused by activating mutations in ret proto-oncogene (RET), screening a library of small molecules that inhibited RET and other kinases identified a lead molecule that caused some flies to survive to adulthood. In the <i>Drosophila</i> model, the initial hit was optimized to block a combination of kinases to increase efficacy and decrease toxicity. In MEN2 mice, the lead molecule decreased tumor growth compared with Caprelsa vandetanib. Next steps include further optimizing the inhibitor and screening kinase inhibitor libraries in <i>Drosophila</i> models of additional cancers.</p> <p>Caprelsa, an inhibitor of RET and other kinases from AstraZeneca plc, is approved to treat advanced medullary thyroid cancer, a disease that can result from MEN2.</p> <p>SciBX 5(27); doi:10.1038/scibx.2012.711 Published online July 12, 2012</p>	Patent application filed; licensing discussions ongoing	<p>Dar, A.C. <i>et al. Nature</i>; published online June 6, 2012; doi:10.1038/nature11127</p> <p>Contact: Kevan M. Shokat, University of California, San Francisco, Calif. e-mail: shokat@cmp.ucsf.edu</p>