This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Chemistry			
Hydrolysis-resistant proteins with Pictet-Spengler ligations	<p>Pictet-Spengler ligations could be useful for creating hydrolysis-resistant biologics. The Pictet-Spengler ligation forms a hydrolysis-resistant carbon-carbon bond between tryptamine and an aldehyde or ketone. In a protein hydrolysis assay, more than 90% of a stabilized fluorescent protein produced by the Pictet-Spengler ligation remained intact after two days, whereas less than 50% of a fluorescent protein produced using another chemical method remained intact. The ligation reaction generated a HER2 (EGFR2; ErbB2; neu)-targeted antibody-drug conjugate that maintained its target affinity. Next steps could include using the ligation reaction to create additional hydrolysis-resistant variants of existing biologics.</p> <p>SciBX 6(2); doi:10.1038/scibx.2013.42 Published online Jan. 17, 2013</p>	Patent pending; licensing details available from the University of California, Berkeley Office of Technology Licensing	<p>Agarwal, P. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 13, 2012; doi:10.1073/pnas.1213186110 Contact: Carolyn R. Bertozzi, University of California, Berkeley, Calif. e-mail: crb@berkeley.edu</p>