This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Modeling the effect of hyperactive mast cells in inflammatory disease	<p>Mice with hyperactive mast cells could help model inflammatory diseases. In cell culture, <i>tumor necrosis factor-α-induced protein 3 (TNFAIP3; A20)</i> depletion enhanced lipopolysaccharide (LPS)- and IL-33 (NF-HEV)-induced mast cell activation. In mice, A20 depletion in mast cells induced a sensitized state without eliciting spontaneous inflammation. In mouse models of asthma, allergic asthma and rheumatoid arthritis (RA), A20 depletion in mast cells exacerbated inflammatory responses. In mouse models of multiple sclerosis (MS), A20 depletion in mast cells had no effect. Next steps include finding methods to stabilize A20 protein to reduce inflammation and studying the role of hyperinflammatory mast cells in cancer.</p> <p>SciBX 7(6); doi:10.1038/scibx.2014.183 Published online Feb. 13, 2014</p>	Unpatented; licensing status not applicable	<p>Heger, K. <i>et al. PLoS Biol.</i>; published online Jan. 14, 2014; doi:10.1371/journal.pbio.1001762 Contact: Marc Schmidt-Supprian, Max Planck Institute of Biochemistry, Martinsried, Germany e-mail: supprian@biochem.mpg.de</p>