This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Crystal structure of variable lymphocyte receptor (VLR) VLRB.aGPA.23 with a tumor-associated glycan antigen	The crystal structure of VLR bound to a tumor-associated glycan antigen could be useful for designing tumor-targeting VLRs for therapeutic and diagnostic applications. VLRs are adaptive immunity proteins from jawless vertebrates that bind glycans with selectivity comparable to that of antibodies. Crystal structure and thermodynamic studies showed that VLRB.aGPA.23 binds the tumor-associated Thomsen-Friedenreich antigen (TF) with four tryptophan residues that create a hydrophobic cage around the target disaccharide. Next steps include developing VLRB.aGPA.23 as a diagnostic reagent and determining its targets for therapeutic applications.	Patents issued and pending covering VLR composition of matter and methods for making and using the VLRs; available for licensing	Luo, M. <i>et al. J. Biol. Chem.</i> ; published online June 19, 2013; doi:10.1074/jbc.M113.480467 Contact: Roy A. Mariuzza, Institute for Bioscience and Biotechnology Research at the University of Maryland, Rockville, Md. e-mail: rmariuzz@umd.edu
	SciBX 6(28); doi:10.1038/scibx.2013.741 Published online July 25, 2013		