This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Mass spectrometric, antibody-free quantification of proteins in biofluids	<p>A mass spectrometry-based method could be useful for quantifying proteins in biofluids with ELISA-like sensitivity. In the method's first step, microliter volumes of trypsin-digested human serum were fractionated via liquid chromatography-tandem mass spectrometry (LC-MS/MS) into a 96-well plate. In the second step, LC-MS/MS analysis of individual or multiple combined fractions detected peptides corresponding to target proteins, thereby enabling quantification of those proteins at low pg/mL concentrations. In human serum from patients with prostate cancer, the method measured prostate-specific antigen (KLK3; PSA) concentrations with an accuracy comparable to that of ELISA. Ongoing work includes using the technique to quantify undisclosed proteins in human urine.</p> <p>SciBX 5(36); doi:10.1038/scibx.2012.964 Published online Sept. 13, 2012</p>	Unpatented; available for partnering	<p>Shi, T. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 4, 2012; doi:10.1073/pnas.1204366109</p> <p>Contact: Wei-Jun Qian, Pacific Northwest National Laboratory, Richland, Wash. e-mail: weijun.qian@pnnl.gov</p>