This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Instrumentation			
Multidimensional, in-cell NMR analysis of proteins	<p>An NMR method can determine protein conformations, functions and interactions in living human cells at atomic resolutions, which could be useful for drug screening programs. Cell-penetrating peptides delivered isotope-labeled human ubiquitin to human HeLa cells, which enabled in-cell, 2D NMR spectrum acquisition that was consistent with previous results in <i>Xenopus</i> oocytes. The same was done with an immunosuppressant target, FKBP12. In addition, after the administration of immunosuppressant FK506 or rapamycin, both the in-cell FKBP12-FK506 complex spectrum and the FKBP12-rapamycin complex spectrum were acquired. Future studies will extend the NMR method to other human cell types and disease-related proteins.</p> <p>SciBX 2(10); doi:10.1038/scibx.2009.428 Published online March 12, 2009</p>	Unpatented; unlicensed	<p>Inomata, K. <i>et al. Nature</i>; published online March 4, 2009; doi:10.1038/nature07839</p> <p>Contact: Masahiro Shirakawa Kyoto University, Kyoto, Japan e-mail: shirakawa@moleng.kyoto-u.ac.jp</p> <p>Contact: Hidehito Tochio, same affiliation as above e-mail: tochio@moleng.kyoto-u.ac.jp</p>