

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
<i>In vitro</i> assay to screen for new inhibitors of leucine-rich repeat kinase 2 (LRRK2)	<p>An <i>in vitro</i> kinase assay could be useful in high throughput screens to identify new selective inhibitors of LRRK2 to treat Parkinson's disease (PD). The new assay tracks ADP formation to enable comparison of small molecules that bind the ATP pocket of LRRK2 and was used in a high throughput screen to identify two compounds that selectively inhibited mutant LRRK2. In cultured neurons that overexpress mutant LRRK2 and show PD-like pathology, one of the screening hits restored the normal neuronal phenotype. In mice, the compound crossed the blood brain barrier and inhibited endogenous LRRK2 but showed poor stability. Next steps could include screening for derivatives with better <i>in vivo</i> stability. Genosco's LRRK2 inhibitor, G-969, is in preclinical development for PD.</p> <p>SciBX 7(40); doi:10.1038/scibx.2014.1188 Published online Oct. 16, 2014</p>	Patent and licensing status unavailable	Liu, Z. <i>et al.</i> <i>J. Biol. Chem.</i> ; published online Sept. 16, 2014; doi:10.1074/jbc.M114.602318 Contact: Andrew B. West, The University of Alabama at Birmingham, Birmingham, Ala. e-mail: abwest@uab.edu