

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Small molecule activator of protein degradation	<p><i>In vitro</i> and cell culture studies suggest that antagonizing ubiquitin specific peptidase 14 tRNA-guanine transglycosylase (USP14; TGT) could be useful for increasing protein degradation. In an <i>in vitro</i> assay of proteasome-mediated protein degradation, excessive USP14 levels blocked proteolysis of substrates compared with normal USP14 levels. In cultured human cells, a small molecule antagonist of USP14 increased proteasome-mediated protein degradation compared with no treatment. Next steps include optimizing and testing the compound in cell and animal models of diseases caused by excess protein accumulation. Hybrigenics S.A. has preclinical compounds that inhibit enzymes related to USP14 to treat cancer.</p> <p>SciBX 3(38); doi:10.1038/scibx.2010.1163 Published online Sept. 30, 2010</p>	Patent pending; available for licensing	<p>Lee, B.-H. <i>et al. Nature</i>; published online Sept. 9, 2010; doi:10.1038/nature09299</p> <p>Contact: Daniel Finley, Harvard Medical School, Boston, Mass. e-mail: daniel_finley@hms.harvard.edu</p> <p>Contact: Randall W. King, same affiliation as above e-mail: randy_king@hms.harvard.edu</p>