

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Chemistry			
Modifications to the siRNA guide strand 5' end that improve therapeutic potency	Structure-guided computational screening identified modifications to the guide strand that could improve the therapeutic properties of siRNA therapeutics. Computational analysis of the structure of the siRNA guide strand in complex with argonaute RISC catalytic component 2 (AGO2) showed that incorporation of triazole derivatives into the siRNA guide strand enhanced binding to AGO2. In a human cell line, siRNA that incorporated triazole-based nucleotides into the guide strand 5' end had greater potency than unmodified siRNA with similar stability. Next steps include testing the modifications in therapeutically relevant siRNAs. <i>SciBX</i> 6(48); doi:10.1038/scibx.2013.1404 Published online Dec. 19, 2013	Unpatented; licensing status not applicable	Onizuka, K. <i>et al.</i> <i>J. Am. Chem. Soc.</i> ; published online Oct. 23, 2013; doi:10.1021/ja4079754 Contact: Peter A. Beal, University of California, Davis, Calif. e-mail: pabeal@ucdavis.edu Contact: Dean J. Tantillo, same affiliation as above e-mail: djtantillo@ucdavis.edu