

THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Quantification of clustered, regularly interspaced short palindromic repeats (CRISPR)-based editing system specificity	Quantification of off-target mutagenesis in CRISPR-based genome editing systems could help evaluate CRISPR systems for potential therapeutic applications and guide the development of CRISPR systems with increased accuracy. CRISPR systems use a small guide RNA, which pairs with a target DNA sequence and the CRISPR-associated protein (Cas9) to excise target DNA. The system recently has been used to rapidly engineer mice and cell lines carrying multiple mutations. A human cell-based GFP assay was used to quantify rates of off-target mutagenesis and found a range of 5.6%–125% off-target activity. Next steps include whole-genome mapping of off-target sites. <i>SciBX</i> 6(29); doi:10.1038/scibx.2013.768 Published online Aug. 1, 2013	Patent and licensing status not applicable	Fu, Y. et al. Nat. Biotechnol.; published online June 23, 2013; doi:10.1038/nbt.2623 Contact: Jeffry D. Sander, Massachusetts General Hospital, Charlestown, Mass. e-mail: jsander@partners.org Contact: J. Keith Joung, same affiliation as above e-mail: jjoung@partners.org