This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Trifluoromethoxydiazole (TFMO)-containing compounds to identify class IIa histone deacetylase (HDAC) inhibitors	TFMO-containing compounds could be used as research compounds to guide development of class IIa HDAC inhibitors. Genetic associations have been identified between class IIa HDACs and Huntington's disease (HD), glucose homeostasis, muscular dystrophies, autoimmunity and ischemic stroke. A screen of about 2 million compounds from GlaxoSmithKline plc's diversity collection identified compounds with HDAC9 inhibitory activity, with 3 of the 4 most potent hits containing the TFMO chemical group. In inhibition assays of HDACs 1–11, the top hit showed preferential inhibition of class IIa HDACs and did not cause cell toxicity. Next steps at Tempero Pharmaceuticals Inc. and GSK include using the research compounds to evaluate the therapeutic potential of class IIa HDACs in autoimmune diseases.	Patent status undisclosed; Tempero is interested in collaboration opportunities	Lobera, M. <i>et al. Nat. Chem. Biol.</i> ; published online March 24, 2013; doi:10.1038/nchembio.1223 Contact: Michael A. Nolan, Tempero Pharmaceuticals Inc., Cambridge, Mass. e-mail: mnolan@temperopharma.com
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