This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
RAC1 P29S as a marker of resistance to BRAF inhibitors in melanoma	<p>Mouse and cell culture studies suggest RAC1 P29S could be useful as a biomarker for resistance to BRAF inhibitors in melanoma. In melanoma cell lines, overexpression of RAC1 P29S increased resistance to the BRAF inhibitors Zelboraf vemurafenib and Tafinlar dabrafenib compared with expression of GFP. In mouse xenograft models of melanoma, a small molecule BRAF inhibitor decreased growth of tumors that expressed wild-type RAC1 or GFP but did not impact the growth of tumors that expressed RAC1 P29S. Ongoing studies include investigating the aberrant oncogenic signaling caused by the <i>RAC1</i> mutation in melanoma and testing combination therapies that target cancers with this mutation. Roche, Chugai Pharmaceutical Co. Ltd. and Daiichi Sankyo Co. Ltd. market Zelboraf to treat BRAF-mutant melanoma. GlaxoSmithKline plc markets Tafinlar to treat BRAF-mutant melanoma.</p> <p>SciBX 7(33); doi:10.1038/scibx.2014.1000 Published online Aug. 28, 2014</p>	Unpatented; licensing status not applicable	<p>Watson, I.R. <i>et al. Cancer Res.</i>; published online July 23, 2014; doi:10.1158/0008-5472.CAN-14-1232-T Contact: Lynda Chin, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: lchin@mdanderson.org</p>