This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Plant-based production of a recombinant microbicidal protein to prevent HIV transmission	<p>A recombinant protein produced in tobacco could be useful for preventing HIV transmission. Large-scale quantities of griffithsin, an algae-derived protein with antimicrobial properties, were prepared in transgenic tobacco and had comparable HIV binding properties to <i>Escherichia coli</i>-derived recombinant griffithsin. In human cervical explants, tobacco-derived griffithsin decreased HIV-1 proliferation after viral challenge compared with that seen in untreated controls. In a rabbit assay of vaginal irritancy, tobacco-derived griffithsin caused less epithelial irritation than Conceptrol, a marketed spermicidal gel. Next steps include human safety trials.</p> <p>SciBX 2(15); doi:10.1038/scibx.2009.644 Published online April 16, 2009</p>	<p>Manufacturing procedure patented by Kentucky Bioprocessing LLC; griffithsin is patented by the National Cancer Institute and is licensed to Intrucept Biomedicine LLC</p>	<p>O'Keefe, B.R. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 30, 2009; doi:10.1073/pnas.0901506106 Contact: Kenneth Palmer, Owensboro Cancer Research Program, Owensboro, Ky. e-mail: kepalm02@gwise.louisville.edu</p>