
This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|---|---|---|--|
| Drug platforms | | | |
| 3D matrix platform for generating mAbs to treat breast cancer | <p>A 3D matrix platform could be useful for generating mAbs to help treat breast cancer. The platform involved seeding 3D aldimine cross-linked collagen matrix scaffolds with a human breast carcinoma cell line to produce antigens, then injecting the matrix into mice to generate a library of about 2,500 mAbs. Screening of the library identified carcinoma-reactive mAbs, and subsequent testing in 3D culture measured the ability of the reactive mAbs to inhibit cancer cell growth. In mice bearing xenograft breast tumors, a lead mAb that targeted integrin α_2 (VLA-2; CD49B) decreased tumor growth and metastasis compared with an inactive control mAb. Next steps include using the lead mAb to generate humanized mAbs and testing them in additional carcinoma models.</p> <p>SciBX 7(40); doi:10.1038/scibx.2014.1191 Published online Oct. 16, 2014</p> | Patent application filed; available for licensing | Dudley, D.T. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Sept. 29, 2014; doi:10.1073/pnas.1410996111 Contact: Stephen J. Weiss, University of Michigan, Ann Arbor, Mich. e-mail: sjweiss@umich.edu |