

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Improved brain delivery of anti-transferrin receptor (TFRC; TFR)-containing antibodies by reducing TFRC affinity	<p>Mouse studies suggest lowering anti-TFRC antibody affinity could increase brain uptake of blood brain barrier (BBB)-penetrant, bispecific antibodies. In mice, a bispecific, anti-TFRC and anti-β-amyloid cleaving enzyme 1 (BACE1) antibody with low affinity for TFRC led to increased surface-expressed Tfrc levels on BBB endothelial cells and increased BBB trafficking and brain uptake compared with a related antibody with high affinity for TFRC. This relative increase in surface-expressed Tfrc was seen because the low-affinity antibody induced less lysosome-mediated degradation of Tfrc than the high-affinity antibody. Ongoing work includes validating the approach in nonhuman primates.</p> <p>SciBX 7(7); doi:10.1038/scibx.2014.209 Published online Feb. 20, 2014</p>	Patent and licensing status undisclosed	<p>Bien-Ly, N. <i>et al. J. Exp. Med.</i>; published online Jan. 27, 2014; doi:10.1084/jem.20131660 Contact: Ryan J. Watts, Genentech Inc., South San Francisco, Calif. e-mail: rwatts@gene.com Contact: Inhee Chung, same affiliation as above e-mail: chung.inhee@gene.com</p>