SciBX
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## This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|---|---|---|---|
| **Drug platforms** | | | |
| Sortase-catalyzed modification to increase stability of therapeutic proteins | *In vitro* and mouse studies suggest that sortase-mediated pegylation and circularization could improve the stability of recombinant protein therapeutics. Sortase-mediated, site-specific pegylation of the C-terminus of interferon-$\alpha_2$ (IFNA2; IFN-$\alpha_2$) or G-CSF (CSF3) led to an increased half-life in mice, whereas *in vitro* biological potency was similar to that in non-pegylated controls. Sortase-mediated pegylation and circularization of IFNA2 led to a greater thermal stability *in vitro* and a greater circulating half-life in mice than an unmodified precursor control. Next steps could include extending the method to modify the N-terminus of therapeutic proteins.<br><br>*SciBX* 4(7); doi:10.1038/scibx.2011.207<br>Published online Feb. 17, 2011 | Patent application filed; available for licensing | Popp, M.W. *et al.* *Proc. Natl. Acad. Sci. USA*; published online Jan. 31, 2011; doi:10.1073/pnas.1016863108<br>**Contact:** Hidde L. Ploegh, Whitehead Institute for Biomedical Research, Cambridge, Mass.<br>e-mail: ploegh@wi.mit.edu |