



This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|---|---|------------------|--|
| Drug platforms | | | |
| Crystal structure of a ternary complex including bacitracin A to guide analog development | A crystal structure of the peptide antibiotic bacitracin A in complex with zinc and a geranyl pyrophosphate ligand could help inform the rational design of new topical antibiotics. The structure of bacitracin A in complex with zinc and geranyl pyrophosphate was solved at 1.1 Å resolution. The structure showed that bacitracin A envelopes the pyrophosphate group of its ligand and zinc ion. The structure also showed that direct bacitracin A-ligand interactions are mediated by hydrogen bonds between the peptide backbone and side chain amide groups of bacitracin A with oxygen atoms of the ligand. Next steps include using the structural information to rationally design and generate candidate molecules for affinity and activity testing. | C | Economou, N.J. et al. Proc. Natl. Acad. Sci. USA; published online Aug. 12, 2013; doi:10.1073/pnas.1308268110 Contact: Patrick J. Loll, Drexel University College of Medicine, Philadelphia, Pa. e-mail: ploll@drexelmed.edu |
| | SciBX 6(36); doi:10.1038/scibx.2013.1012 Published online Sept. 19, 2013 | | |