

THE DISTILLERY

This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|---|--|--|---|
| Assays & screens | | | |
| Chromatin immunoprecipitation with reference exogenous genome (ChIP-Rx) | ChIP-Rx could be useful for epigenome profiling to enable quantitative comparison between samples. Current epigenome profiling with chromatin immunoprecipitation followed by DNA sequencing (ChIP-seq) lacks an empirical normalization method, which limits its use for quantitative comparisons. In ChIP-Rx, a constant amount of reference epigenome is added on a per-cell basis to normalize measurements and enable direct comparison between multiple ChIP-seq samples. In a proof-of-concept study, ChIP-Rx enabled detection and quantification of epigenomic alterations in human leukemia cells treated with EPZ-5676. Next steps could include using ChIP-Rx to profile the response of cancer cells to additional drugs. Epizyme Inc. has the small molecule histone methyltransferase DOT1L (DOT1L) inhibitor EPZ-5676 in Phase I testing to treat | Patent and licensing status unavailable | Orlando, D.A. <i>et al. Cell Rep.</i> ; published online Oct. 30, 2014; doi:10.1016/j.celrep.2014.10.018 Contact: Matthew G. Guenther, Syros Pharmaceuticals Inc., Watertown, Mass. e-mail: mguenther@syros.com Contact: David A. Orlando, same affiliation as above e-mail: dorlando@syros.com |

SciBX 7(47); doi:10.1038/scibx.2014.1389 Published online Dec. 11, 2014

rearranged leukemia.

myeloid-lymphoid or mixed-lineage leukemia (MLL; HRX)-