

Margaret Porter Scott Publications

1. Knutson SK, Warholic NM, Wigle TJ, Klaus CR, Allain CJ, Raimondi A, Scott MP, Chesworth R, Moyer MP, Copeland RA, Richon VM, Pollock RM, Kuntz KW, Keilhack H Durable tumor regression in genetically altered malignant rhabdoid tumors by inhibition of methyltransferase EZH2 PNAS 2013 110:7922-7927
2. Daigle SR, Olhava EJ, Therkelsen CA, Basavapathruni A, Jin L, Boriack-Sjodin PA, Allain CJ, Klaus CR, Raimondi A, Scott MP, Waters NJ, Chesworth R, Moyer MP, Copeland RA, Richon VM and Pollock RM Potent Inhibition of DOT1L as Treatment for MLL-Fusion Leukemia Blood 2013 122:1017-1025
3. Swalm BM, Hallenbeck KK, Majer CR, Jin L, Scott MP, Moyer MP, Copeland RA, Wigle TJ Convergent Evolution of Chromatin Modification by Structurally Distinct Enzymes: Comparative Enzymology of Histone 3 Lysine 27 Methylation by Human Polycomb Repressive Complex 2 and Viral vSET 2013 Biochem J 453:241-247
4. Knutson SK, Wigle TJ, Warholic NM, Sneeringer CJ, Allain CJ, Klaus, CR, Sacks JD, Raimondi A Majer CR, Song J, Scott MP, Jin L, Smith JJ, Olhava EJ, Chesworth R, Moyer MP, Richon VM, Copeland RA, Keihack H, Pollack RM, Kuntz KW 2012 A selective inhibitor of EZH2 blocks H3K27 methylation and kills mutant lymphoma cells. Nat Chem Biol 8, 890-896.
5. Basavapathruni A, Jin L, Daigle SR, Majer C, Therkelsen CA, Wigle TJ, Kuntz KW, Chesworth R, Pollock RM, Scott MP, Moyer MP, Richon VM, Copeland RA, Olhava EJ 2012 Conformational Adaptation Drives Potent, Selective and Durable Inhibition of the Human Protein Methyltransferase DOT1L Chem. Biol. Drug Des. 80:971-980
6. Majer C., Jin L, Scott MP, Knutson SK, Kuntz KW, Keilhack H, Smith JJ, Moyer MP, Richon VM, Copeland RA, Wigle TJ 2012 A687V EZH2 is a gain-of-function mutation found in lymphoma patients. FEBS Lett 586:3448-3451.
7. Duffey MO, Vas TJ, Adams R, Alley J, Anthony J, Barrett C, Bharathan I, Bowman D, Bump NJ, Chau R, Cullis C, Driscoll DL, Elder A, Forsyth N, Frazer J, Guo J, Guo L, Hyer ML, Janowick D, Kulkarni B, Lai SJ, Lasky K, Li G, Li J, Liao D, Little J, Peng B, Qian MG, Reynolds DJ, Rezaei M, Scott MP, Sells TB, Shinde V, Shi QJ, Sintchak MD, Soucy F, Sprott KT, Stroud SG, Nestor M, Visiers I, Weatherhead G, Ye Y, D'Amore N. Discovery of a potent and orally bioavailable Benzolactamderived inhibitor of Polo-like kinase 1 (MLN0905). J Med Chem . 2012 Jan 12;55(1):197-208.
8. Copeland RA, Basavapathruni A, Moyer M, Scott MP. Impact of enzyme concentration and residence time on apparent activity recovery in jump dilution analysis. Anal Biochem . 2011 Sep 15;416(2):206-10. Epub 2011 May 27.
9. Wigle TJ, Knutson SK, Jin L, Kuntz KW, Pollock RM, Richon VM, Copeland RA, Scott MP 2011 The Y641 mutation of EZH2 alters substrate specificity for histone H3 lysine 27 methylation states. FEBS Lett. 585(19):3011-4
10. Daigle SR, Olhava EJ, Therkelsen CA, Majer CR, Sneeringer CJ, Song J, Johnston LD, Scott MP, Smith JJ, Xiao Y, Jin L, Kuntz KW, Chesworth R, Moyer MP, Bernt KM, Tseng JC, Kung AL, Armstrong SA, Copeland RA, Richon VM, Pollock RM. Selective killing of mixed lineage leukemia cells by a potent small-molecule DOT1L inhibitor. Cancer Cell. 2011 20(1):53-65.
11. Richon VM, Johnston D, Sneeringer CJ, Jin L, Majer CR, Elliston K, Jerva LF, Scott MP,

- Copeland RA. Chemogenetic analysis of human protein methyltransferases. *Chem Bioi Drug Des* . 2011 78(2):199-210.
12. Sneeringer CJ, Scott MP, Kuntz KW, Knutson SK, Pollock RM, Richon VM, Copeland RA. Coordinated activities of wild-type plus mutant EZH2 drive tumor-associated hypertrimethylation of lysine 27 on histone H3 (H3K27) in human B-cell lymphomas. *Proc Nat. Acad Sci* 2010107(49):20980-5.
 13. Copeland RA, Olhava EJ, Scott MP. Targeting epigenetic enzymes for drug discovery. *Curr Opin Chem Biol.* 2010 4:505-10. Review.
 14. Annis DA, Nazef N, Chuang CC, Scott MP, Nash HM. A general technique to rank proteinligand binding affinities and determine allosteric versus direct binding site competition in compound mixtures. *J Am. Chem Soc.* 2004 126(47):15495-503.
 15. Scott MP, Zappacosta F, Kim EY, Annan RS, Miller WT. Identification of Novel SH3 Domain Ligands for the Src Family Kinase Hck. (2002). *J. Bio. Chem.* 277:28238-28246.
 16. Boonyaratanaornkit V, Scott MP, Ribon V, Anderson SA, Miller WT, Edwards DP. Progesterone receptor contains a proline rich sequence in the amino terminus that directly interacts with SH3 domains and activates Src family tyrosine kinases (2001). *Mol. Cell* 8:1-20.
 17. Scott MP, Miller WT. A peptide model system for processive phosphorylation of Src family kinases (2000). *Biochem.* 39(47):14531-7.
 18. Nguyen JT, Porter M, Amoui M, Miller WT, Zuckermann RT, Lim WA. Improving SH3 domain ligand selectivity using a non-natural scaffold (2000). *Chem. Biol.* 7:463-473.
 19. Chen G, Porter MD, Bristol JR, Fitzgibbon MJ, Pazhanisamy S. Kinetic mechanism of the p38-alpha MAP kinase: phosphoryl transfer to synthetic peptides (2000). *Biochem.* 39(8): 2079-2087.
 20. Porter M, Schindler T, Kuriyan J, Miller WT. Reciprocal regulation of Hck activity by phosphorylation of Tyr(527) and Tyr(416): effect of introducing a high affinity intramolecular SH2 ligand (2000). *Bioi. Chem.* . 275(4):2721-6.
 21. Van Nostrand WE, Porter M. Plasmin cleavage of the amyloid beta-protein: alteration of secondary structure and stimulation of tissue plasminogen activator activity (1999). *Biochem.* 38(35):11570-6.
 22. Salituro FG, Baker CT, Court JJ, Deininger DD, Kim EE, Li B, Novak PM, Rao BG, Pazhanisamy S, Porter MD, Schairer WC, Tung RD. Design and synthesis of novel conformationally restricted HIV protease inhibitors (1998). *Bioorg Med Chem Lett.* 8(24):3637-42.
 23. Fox T, Coli JT, Xie X, Ford PJ, Germann UA, Porter MD, Pazhanisamy S, Fleming MA, Galullo V, Su MS, Wilson KP. A single amino acid substitution makes ERK2 susceptible to pyridinyl imidazole inhibitors of p38 MAP kinase (1998). *Protein Sci.* 7(11):2249-55.
 24. LaFevre-Bernt M, Sicheri F, Pica A, Porter M, Kuriyan J, Miller WT. Intramolecular regulatory interactions in the Src family kinase Hck probed by mutagenesis of a conserved tryptophan residue (1998). *J. Bioi. Chem.* . 273(48):32129-34.
 25. Thompson RQ, Porter MD, Stuver C. Zeptomole detection limit for alkaline phosphatase using 4-aminophenylphosphate, amperometric detection, and an optimal buffer system (1993). *Analytica Chimica Acta*, 271: 23-229.