NExT Discovery Project Publications

AAA ATPase p97:

A threonine turnstile defines a dynamic amphiphilic binding motif in the AAA ATPase p97 allosteric binding site

James C. Burnett, Chaemin Lim, Brian D. Peyser, Lalith P. Samankumara, Marina Kovaliov, Raffaele Colombo, Stacie L. Bulfer, Matthew G. LaPorte, Ann R. Hermone, Connor F. McGrath, Michelle R. Arkin, Rick Gussio, Donna M. Huryn & Peter Wipf, *Org. Biomol. Chem.* **2017**, 15, 4096

Structure−Activity Study of Bioisosteric Trifluoromethyl and Pentafluorosulfanyl Indole Inhibitors of the AAA ATPase p97

Celeste Alverez, Michelle R. Arkin, Stacie L. Bulfer, Raffaele Colombo, Marina Kovaliov, Matthew G. LaPorte, Chaemin Lim, Mary Liang, William J. Moore, R. Jeffrey Neitz, Yongzhao Yan, Zhizhou Yue, Donna M. Huryn & Peter Wipf, *ACS Med Chem. Lett*. **2015**, *6*, 1225-30

Evaluating p97 inhibitor analogues for their domain selectivity and potency against the p97-p47 complex

Fang, C.J., Gui, L., Zhang, X., Moen, D.R., Li, K., Frankowski, K.J., Lin, H. J., Schoenen, F.J. & Chou, T.-F., *ChemMedChem*. **2015,** *10*, 52-56

Altered cofactor regulation with disease-associated p97/VCP mutations

Zhang, X., Gui, L., Zhang, X., Bulfer, S.L., Sanghez, V., Wong, D.E., Lee, Y., Lehmann, L., Lee, J.S., Shih, P.Y., Lin, H.J., Iacovino, M., Weihl, C.C., Arkin, M.R., Wang, Y. & Chou, T.F., *Proc Natl Acad Sci U S A.* **2015**, *112*, E1705-14.

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Specific inhibition of p97/VCP ATPase and kinetic analysis demonstrate interaction between D1 and D2 ATPase domains

Chou, T.-F., Bulfer, S. L., Weihl, C.C., Li, K., Lis, L.G., Walters, M.A., Schoenen, F.J., Lin, H.J., Deshaies, R.J. & Arkin, M.R., *J. Mol. Biol*. **2014**, *426*, 2886–2899

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Chou, T.-F., Li, K., Frankowski, K.J., Schoenen, F.J. & Deshaies, R.J., *ChemMedChem,* **2013***, 8*, 297–312

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Discovery of Tricyclic Indoles That Potently Inhibit Mcl-1 Using Fragment-Based Methods and Structure-Based Design

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Small molecule Mcl-1 inhibitors for the treatment of cancer

Belmar, J. & Fesik, S.W., *Pharmacol Ther*. **2015**, *145*, 76-84

Discovery of potent myeloid cell leukemia 1 (Mcl-1) inhibitors using fragment-based methods and structure-based design

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