

DD-related publications from the Wandless Lab
(<http://wandless.stanford.edu/publications.html>):

FKBP-derived DD publications

LA Banaszynski, L-C Chen, LA Maynard-Smith, AGL Ooi, TJ Wandless "A Rapid, Reversible, and Tunable Method to Regulate Protein Function in Living Cells Using Synthetic Small Molecules." *Cell*, **2006**, 126, 995-1004.

LA Maynard-Smith, L-C Chen, LA Banaszynski, AGL Ooi, TJ Wandless "A Directed Approach for Engineering Conditional Protein Stability using Biologically Silent Small Molecules." *J. Biol. Chem.*, **2007**, 282, 24866-24872.

LA Banaszynski, MA Sellmyer, CH Contag, TJ Wandless, SH Thorne "Chemical control of protein stability and function in living mice." *Nature Medicine*, **2008**, 14, 1123-1127.

JS Grimley, DA Chen, LA Banaszynski, TJ Wandless "Synthesis and Analysis of Stabilizing Ligands for FKBP-Derived Destabilizing Domains." *Bioorg. Med. Chem. Lett.*, **2008**, 18, 759-761.

BW Chu, LA Banaszynski, L-C Chen, TJ Wandless "Recent Progress with FKBP-Derived Destabilizing Domains." *Bioorg. Med. Chem. Lett.*, **2008**, 18, 5941-5944.

EL Hagan, LA Banaszynski, L-C Chen, LA Maynard-Smith, TJ Wandless "Regulating protein stability in mammalian cells using small molecules." *CSH Protocols* **2009** doi: 10.1101/pdb.prot5172.

MA Sellmyer, SH Thorne, LA Banaszynski, CH Contag TJ Wandless "A general method for conditional regulation of protein stability in living animals." *CSH Protocols* **2009** doi: 10.1101/pdb.prot5173.

MD Kwan, MA Sellmyer, N Quarto, AM Ho, TJ Wandless, MT Longaker "Chemical control of FGF-2 release for promoting calvarial healing with adipose stem cells." *J. Biol. Chem.* **2011**, 286, 11307-11313.

KM Bonger, L-c Chen, CW Liu, TJ Wandless "Small molecule displacement of a cryptic degron causes conditional protein degradation." *Nature Chemical Biology* **2011**, 7, 531-537.

EL Egeler, LM Urner, R Rakhit, C Liu, TJ Wandless "Ligand-switchable substrates for the ubiquitin-proteasome system." *J. Biol. Chem.* **2011**, 286, 31328-31336.

ecDHFR-derived DD publications

M Iwamoto, T Björklund, C Lundberg, D Kirik, TJ Wandless "A general chemical method to regulate protein stability in the mammalian central nervous system." *Chemistry & Biology* **2010**, 17, 981-988.

V Muralidharan, A Oksman, M Iwamoto, TJ Wandless, DE Goldberg "Asparagine repeat function in a *Plasmodium falciparum* protein assessed via a regulatable fluorescent affinity tag." *Proc. Natl. Acad. Sci. USA* **2011**, 108, 4411-4416.

R Rakhit, SR Edwards, M Iwamoto, TJ Wandless "Evaluation of FKBP and DHFR based destabilizing domains in *Saccharomyces cerevisiae*." *Bioorg. Med. Chem. Lett.* **2011**, 21, 4965-4968.

Publications from Other Labs using the FKBP-derived DD system:

Please send additions or corrections to wandless@stanford.edu

R Berdeaux, N Goebel, LA Banaszynski, H Takemori, TJ Wandless, GD Shelton, M Montminy "SIK1 is a Class II HDAC Kinase that Promotes Survival of Skeletal Myocytes." *Nature Medicine*, **2007**, 13, 597-603.

A Herm-Gotz, C Agop-Nersesian, S Munter, JS Grimley, TJ Wandless, F Frischknecht, M. Meissner "Rapid Control of Protein Levels in the Apicomplexan Parasite *Toxoplasma gondii*." *Nature Methods*, **2007**, 4, 1003-1005.

CM Armstrong, DE Goldberg "An FKBP destabilization domain modulates protein levels in *Plasmodium falciparum*." *Nature Methods*, **2007**, 4, 1007-1009.

I Russo, A Oksman, B Vaupel, DE Goldberg "A calpain unique to alveolates is essential in *Plasmodium falciparum* and its knockdown reveals an involvement in pre-S-phase development." *Proc Natl Acad Sci USA* **2009**, 106, 1554-1559.

L Madeira da Silva, KL Ownes, SMF Murta, SM Beverley "Regulated expression of the *Leishmania major* surface virulence factor lipophosphoglycan using conditionally destabilized fusion proteins." *Proc Natl Acad Sci USA* **2009**, 106, 7583-7588.

SM Pruett-Miller, DW Reading, SN Porter, MH Porteus "Attenuation of zinc finger nuclease toxicity by small-molecule regulation of protein levels." *PLoS Genetics* **2009**, 5, e1000376.

JPH Schober, SFJ van de Graaf, KP Lee, HGM Wittgen, JGJ Hoenderop, RJM Bindels "Conditional fast expression and function of multimeric TRPV5 channels using Shield-1." *Am. J. Physiol. Renal. Physiol.* **2009**, 296, F204-F211.

E Campeau, VE Ruhl, F Rodier, CL Smith, BL Rahmberg, JO Fuss, J Campisi, P Yaswen, PK Cooper, PD Kaufman "A versatile viral system for expression and depletion of proteins in mammalian cells." *PLoS ONE* **2009**, 4, e6529.

M Glass, A Busche, K Wagner, M Messerle, EM Borst "Conditional and reversible disruption of essential herpesvirus proteins." *Nature Methods*, **2009**, 6, 577-580.

JD Dvorin, DC Martyn, SD Patel, JS Grimley, CR Collins, CS Hopp, AT Bright, S Westenberger, E Winzeler, MJ Blackman, DA Baker, TJ Wandless, MT Durasingh "A plant-like kinase in *Plasmodium falciparum* regulates parasite egress from erythrocytes." *Science* **2010**, 328, 910-912.

Y Gong, T de Lange "A Shld1-Controlled POT1a provides support for repression of ATR signaling at telomeres through RPA exclusion." *Mol. Cell*, **2010**, 40, 377-387.

BP Dolan, L Li, CA Veltri, CM Ireland, JR Bennink, JW Yewdell "Distinct pathways generate peptides from defective ribosomal products for CD8+ T cell Immunosurveillance." *J. Immunol.* **2011**, 186, 2065-2072.