

Publications

87 research publications, 18 reviews and editorials, 2 book chapters

(citations in WebOfScience Core Collection: 5521; H-index: 39)

Research publications

- 87) Pinto A, El Ali Z, Moniot S, Tamborini L, **Steegborn C**, Foresti R, De Micheli C (2018) Effects of 3-Bromo-4,5-dihydroisoxazole Derivatives on Nrf2 Activation and Heme Oxygenase-1 Expression. *ChemistryOpen* 7, 858-864.
- 86) You W, **Steegborn C** (2018) Structural Basis of Sirtuin 6 Inhibition by the Hydroxamate Trichostatin A: Implications for Protein Deacetylase Drug Development. *J. Med. Chem.*, in press. doi: 10.1021/acs.jmedchem.8b01455
- 85) Iachettini S, Trisciuglio D, Rotili D, Lucidi A, Salvati E, Zizza P, Di Leo L, Del Bufalo D, Ciriolo MR, Leonetti C, **Steegborn C**, Mai A, Rizzo A, Biroccio A (2018) Pharmacological activation of SIRT6 triggers lethal autophagy in human cancer cells. *Cell Death Dis.* 9, 996.
- 84) D. Kalbas, S. Liebscher, T. Nowak, M. Meleshin, M. Pannek, C. Popp, Z. Alhalabi, F. Bordusa, W. Sippl, **C. Steegborn**, M. Schutkowski (2018) Potent and Selective Inhibitors of Human Sirtuin 5. *J. Med. Chem.* 61, 2460-2471.
- 83) M. Pannek, Z. Simic, M. Fuszard, M. Meleshin, D. Rotili, A. Mai, M. Schutkowski, **C. Steegborn** (2017) Crystal structures of the mitochondrial deacetylase Sirtuin 4 reveal isoform-specific acyl recognition and regulation features. *Nat. Commun.* 8:1513.
- 82) Rajabi N, Auth M, Troelsen KR, Pannek M, Bhatt D, Fontenas M, Hirshey MD, **Steegborn C**, Madsen AS, Olsen CA (2017) Mechanism-based Inhibitors of the Human Sirtuin 5 Deacetylase: Structure-Activity Relationship, Biostructural, and Kinetic Insight. *Angew. Chem. Int. Ed. Engl.* 56, 14836-14841.
- 81) Quinti L, Dayalan Naidu S, Träger U, Chen X, Kegel-Gleason K, Llères D, Connolly C, Chopra V, Low C, Moniot S, Sapp E, Tousley AR, Vodicka P, Van Kanegan MJ, Kaltenbach LS, Crawford LA, Fuszard M, Higgins M, Miller JRC, Farmer RE, Potluri V, Samajdar S, Meisel L, Zhang N, Snyder A, Stein R, Hersch SM, Ellerby LM, Weerapana E, Schwarzschild MA, **Steegborn C**, Leavitt BR, Degtrev A, Tabrizi SJ, Lo DC, DiFiglia M, Thompson LM, Dinkova-Kostova AT, Kazantsev AG (2017) A KEAP1-modifying small molecule reveals muted NRF2 signaling responses in neural stem cells from Huntington disease patients. *Proc. Natl Acad. Sci. USA* 114, E4676-E4685.
- 80) C.G.F. Graf, C. Schulz, M. Schmälzlein, C. Heinlein, M. Mönnich, L. Perkams, M. Püttner, I. Boos, M. Hessefort, J.N. Lombana Sanchez, M. Weyand, **C. Steegborn**, B. Breiden, K. Ross, G. Schwarzmann, K. Sandhoff, C. Unverzagt (2017) Synthetic Glycoforms reveal Carbohydrate-Dependent Bioactivity of Human Saposin D. *Angew. Chem. Int. Ed. Engl.* 56, 5252-5257.
- 79) Li J, Bonkowski MS, Moniot S, Zhang D, Hubbard BP, Ling AJ, Rajman LA, Qin B, Lou Z, Gorbunova V, Aravind L, **Steegborn C**, Sinclair DA (2017) A conserved NAD⁺ binding pocket that regulates protein-protein interactions during aging. *Science* 355, 1312-1317.
- 78) de Oliveira RM, Vicente Miranda H, Francelle L, Pinho R, Szegő ÉM, Martinho R, Munari F, Lázaro DF, Moniot S, Guerreiro P, Fonseca L, Marijanovic Z, Antas P, Gerhardt E, Enguita FJ, Fauvet B, Penque D, Pais TF, Tong Q, Becker S, Kügler S, Lashuel HA, **Steegborn C**, Zweckstetter M, Outeiro TF (2017) The mechanism of sirtuin 2-mediated exacerbation of alpha-synuclein toxicity in models of Parkinson disease. *PLoS Biol.* 2017 15:e2000374.
- 77) Moniot S, Forgione M, Lucidi A, Hailu GS, Nebbioso A, Carafa V, Baratta F, Altucci L, Giacché N, Passeri D, Pellicciari R, Mai A, **Steegborn C**, Rotili D (2017) Development

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71) Schuster S, Roessler C, Meleshin M, Zimmermann P, Simic Z, Kambach C, Schiene-Fischer C, **Steegborn C**, Hottiger MO, Schutkowski M. (2016) A continuous sirtuin activity assay without any coupling to enzymatic or chemical reactions. *Sci. Rep.* 6:22643.

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69) U. Schweizer & **C. Steegborn** (2015) Thyroid hormones—From Crystal Packing to Activity to Reactivity. *Angew. Chem. Int. Ed. Engl.* 54, 12856-8.

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- 59) S. Kleinboelting, J. van den Heuvel, **C. Steegborn** (2014) Structural analysis of human soluble adenylyl cyclase and crystal structures of its nucleotide complexes - implications for cyclase catalysis and evolution. *FEBS J.* 281, 4151-64.
- 58) U. Schweizer, C. Schlicker, D. Braun, J. Köhrle, **C. Steegborn** (2014) Crystal structure of mammalian selenocysteine-dependent iodothyronine deiodinase suggests a peroxiredoxin-like catalytic mechanism. *Proc. Natl Acad. Sci. USA* 111, 10526-31.
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- 53) G.T.T. Nguyen, S. Schaefer, M. Gertz, M. Weyand, **C. Steegborn** (2013) Crystal structures of Sirt3 complexes with the resveratrol derivative 5-(2-(4-bromophenyl)vinyl)-1,3-benzenediol reveal binding sites and inhibition mechanism. *Chem. Biol.* 20:1375-85.
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- 49) G. Laurent, N.J. German, A.K. Saha, V.C. de Boer, M. Davies, T.R. Koves, N. Dephore, F. Fischer, G. Boanca, B. Vaitheesvaran, S.B. Lovitch, A.H. Sharpe, I.J. Kurland, **C. Steegborn**, S.P. Gygi, D.M. Muoio, N.B. Ruderman, M.C. Haigis (2013) SIRT4 coordinates the balance between lipid synthesis and catabolism by repressing malonyl CoA decarboxylase. *Mol. Cell* 50, 686-98.
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