

List of Publications of Dr. Sarno

- 79) Cozza, G., Venerando, A., **Sarno, S.**, Pinna, L.A. (2015) "The selectivity of CK2 inhibitor quinalizarin: a reevaluation" *Biomed. Res. Int.* doi: 10.1155/2015/734127
- 78) Cozza, G., Zanin, S., **Sarno, S.**, Girardi, C., Ribauda, G., Salvi, M., Zagotto, G., Ruzzene, M., Pinna, L.A. (2015) "Design, validation and efficacy of bisubstrate inhibitors specifically affecting ecto-CK2 kinase activity" *Biochem. J.* 471, 415-30.
- 77) Foka, P., Dimitriadis, A., Kyrtzopoulou, E., Giannimaras, D. A., **Sarno, S.**, Simos, G., Georgopoulou, U. and Mamalaki, A. (2014) "A complex signalling network involving protein kinase CK2 is required for hepatitis C virus core protein-mediated modulation of the iron-regulatory hepcidin gene expression" *Cell. Mol. Life Sci.* 71, 4243-58.
- 76) Costa, R., Arrigoni, G., Cozza, G., Lolli, G., Battistutta R., Izpisua Belmonte, J. C., Pinna, L. A. and **Sarno S.** (2014) "The lysine-specific demethylase 1 is a novel substrate of protein kinase CK2" *Biochim. Biophys. Acta* 1844, 722-729. * **corresponding author**
- 75) Cozza, G., Girardi, C., Ranchio, A., Lolli, G., **Sarno, S.**, Orzeszko, A., Kazimierczuk, Z., Battistutta, R., Ruzzene, M. and Pinna, L. A. (2014) "Cell-permeable dual inhibitors of protein kinases CK2 and PIM-1: structural features and pharmacological potential" *Cell. Mol. Life Sci.* 71, 3173-85.
- 74) Cozza, G., **Sarno, S.**, Ruzzene, M., Girardi, C., Orzeszko, A., Kazimierczuk, Z., Zagotto, G., Bonaiuto, E., Di Paolo, M. L. and Pinna, L. A. (2013) "Exploiting the repertoire of CK2 inhibitors to target DYRK and PIM kinases." *Biochim. Biophys Acta.* 1834, 1402-9.
- 73) Vallese, F., Berto, P., Ruzzene, M., Cendron, L., **Sarno, S.**, De Rosa, E., Giacometti, G. M. and Costantini, P. (2012) "Biochemical analysis of the interactions between the proteins involved in the [FeFe]-hydrogenase maturation process." *J. Biol. Chem.* 287, 36544-36555.
- 72) Lolli, G., Cozza, G., Mazzorana, M., Tibaldi, E., Cesaro, L., Donella-Deana, A., Meggio, F., Venerando, A., Franchin, C., **Sarno, S.**, Battistutta, R. and Pinna, L. A. (2012) "Inhibition of protein kinase CK2 by flavonoids and tyrphostins. A structural insight." *Biochemistry* 51, 6097-6107.
- 71) Salvi, M., Trashi, E., Marin, O., Negro, A., **Sarno, S.** and Pinna, L. A. (2012) "Superiority of PLK-2 as α -synuclein phosphorylating agent relies on unique specificity determinants." *Biochem. Biophys Res. Commun.* 418, 156-60.
- 70) **Sarno, S.**, Mazzorana, M., Traynor, R., Ruzzene, M., Cozza, G., Pagano, M. A., Zagotto, G., Battistutta, R. and Pinna, L. A. (2012) "Structural features underlying the selectivity of the kinase inhibitors NBC and dNBC: role of a nitro group that discriminates between CK2 and DYRK1A." *Cell. Mol. Life Sci.* 69, 449-60.

- 69) Battistutta, R., Cozza, G., Pierre, F., Papinutto, E., Lolli, G., **Sarno, S.**, O'Brien, S. E., Siddiqui-Jain, A., Haddach, M., Anderes, K., Ryckman, D. M., Meggio, F. and Pinna L.A. (2011) "Unprecedented selectivity and structural determinants of a new class of protein kinase CK2 inhibitors in clinical trials for the treatment of cancer." *Biochemistry* 50, 8478-88.
- 68) Tosoni, K., Costa, A., **Sarno, S.**, D'Alessandro, S., Sparla, F., Pinna, L. A., Zottini, M. and Ruzzene, M. (2011) "The p23 co-chaperone protein is a novel substrate of CK2 in Arabidopsis." *Mol. Cell Biochem.* 356, 245-54.
- 67) **Sarno, S.**, Papinutto, E., Franchin, C., Bain, J., Elliott, M., Meggio, F., Kazimierczuk, Z., Orzeszko, A., Battistutta, R. and Pinna, L. A. (2011) "ATP site-directed inhibitors of protein kinase CK2: An Update" *Curr. Top. Med. Chem.* 11, 1340-1351.
- 66) Venerando, A., Marin, O., Cozza, G., Bustos, V. H., **Sarno, S.** and Pinna, L. A. (2010) "Isoform specific phosphorylation of p53 by protein kinase CK1" *Cell. Mol. Life Sci.* 67, 1105-18.
- 65) Pagano, M. A., Marin, O., Cozza, G., **Sarno, S.**, Meggio, F., Treharne, K. J., Mehta, A. and Pinna, L. A. (2010) "Cystic fibrosis transmembrane regulator fragments with the Phe508 deletion exert a dual allosteric control over the master kinase CK2" *Biochem. J.* 426, 19-29.
- 64) Salvi, M., Xu, D., Chen, Y., Cabrelle, A., **Sarno, S.** and Pinna, L. A. (2009) "Programmed cell death protein 5 (PDCD5) is phosphorylated by CK2 *in vitro* and in 293T cells" *Biochem. Biophys Res. Commun.* 387, 606-10.
- 63) Cozza, G., Mazzorana, M., Papinutto, E., Bain, J., Elliott, M., Di Maira, G., Gianoncelli, A., Pagano, M. A., **Sarno, S.**, Ruzzene, M., Battistutta, R., Meggio, F., Moro, S., Zagotto, G. and Pinna, L. A. (2009) "Quinalizarin as a potent, selective and cell-permeable inhibitor of protein kinase CK2" *Biochem. J.* 421, 387-95.
- 62) Salvi, M., **Sarno, S.**, Cesaro, L., Nakamura, H. and Pinna, L. A. (2009) "Extraordinary pleiotropy of protein kinase CK2 revealed by weblogo phosphoproteome analysis" *Biochim. Biophys Acta.* 1793, 847-59.
- 61) **Sarno, S.** and Pinna, L. A. (2008) "Protein kinase CK2 as a druggable target" *Mol Biosyst.* 4, 889-94.
- 60) Vilck, G., Weber, J. E., Turowec, J. P., Duncan, J. S., Wu, C., Derksen, D. R., Zien, P., **Sarno, S.**, Donella-Deana, A., Lajoie, G., Pinna, L. A., Li, S. S. and Litchfield, D. W. (2008) "Protein kinase CK2 catalyzes tyrosine phosphorylation in mammalian cells" *Cell Signal.* 20, 1942-51.
- 59) Poletto, G., Vilardell, J., Marin, O., Pagano, M. A., Cozza, G., **Sarno, S.**, Falqués, A., Itarte, E., Pinna, L. A. and Meggio, F. (2008) "The regulatory β subunit of protein kinase CK2 contributes

to the recognition of the substrate consensus sequence. A study with an eIF2 β -derived peptide” *Biochemistry* 47, 8317-25.

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- 54) Pagano, M. A., Poletto, G., Di Maira, G., Cozza, G., Ruzzene, M., **Sarno, S.**, Bain, J., Elliott, M., Moro, S., Zagotto, G., Meggio, F. and Pinna, L. A. (2007) “Tetrabromocinnamic acid (TBCA) and related compounds represent a new class of specific protein kinase CK2 inhibitors” *ChemBiochem* 8, 129-39.
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- 52) Cozza, G., Bonvini, P., Zorzi, E., Poletto, G., Pagano, M. A., **Sarno, S.**, Donella-Deana, A., Zagotto, G., Rosolen, A., Pinna, L. A., Meggio, F. and Moro, S. (2006) “Identification of ellagic acid as potent inhibitor of protein kinase CK2: a successful example of a virtual screening application” *J. Med. Chem.* 49, 2363-66.
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- 50) Llorens, F., **Sarno, S.**, Sarro, E., Duarri, A., Roher, N., Meggio, F., Plana, M., Pinna, L. A. and Itarte, E. (2005) “Cross talk between protein kinase CK2 and eukaryotic translation initiation factor eIF2 β subunit” *Mol. Cell Biochem.* 274, 53-61.

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- 42) Meggio, F., Pagano, M. A, Moro, S., Zagotto, G., Ruzzene, M., **Sarno, S.**, Cozza, G., Bain, J., Elliott, M., Deana, A. D., Brunati, A. M. and Pinna, L. A. (2004) "Inhibition of protein kinase CK2 by condensed polyphenolic derivatives. An in vitro and in vivo study." *Biochemistry* 43, 12931-6.
- 41) Marchetta, M., Gamberi, T., **Sarno, S.**, Magherini, F., Raugei, G., Camici, G., Pinna, L. A. and Modesti, A (2004) "Expression of the Stp1 LMW-PTP and inhibition of protein CK2 display a cooperative effect on immunophilin Fpr3 tyrosine phosphorylation and *Saccharomyces cerevisiae* growth." *Cell. Mol. Life Sci.* 61, 1176-84.
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- 39) Llorens, F., Roher, N., Miro, F. A., **Sarno, S.**, Ruiz, F. X., Meggio, F., Plana, M., Pinna, L. A. and Itarte, E. (2003) "Eukaryotic translation-initiation factor eIF2beta binds to protein kinase CK2: effects on CK2alpha activity" *Biochem. J.* 375, 623-31.
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