

Maria Ruzzene
List of publications

(* : corresponding author)

1. Cozza G, Zanin S, Sarno S, Costa E, Girardi C, Ribaldo G, Salvi M, Zagotto G, ***Ruzzene M**, Pinna LA. Design, validation and efficacy of bi-substrate inhibitors specifically affecting ecto-CK2 kinase activity. *Biochem J.* **2015**, 471(3):415-430
2. Girardi C, Ottaviani D, Pinna LA, ***Ruzzene M**. Different persistence of the cellular effects promoted by protein kinase CK2 inhibitors CX-4945 and TDB. *Biomed Res Int* **2015**, 2015:185736
3. Marmiroli S, Fabbro D, Miyata Y, Pierobon M, **Ruzzene M**. Phosphorylation, Signaling, and Cancer: Targets and Targeting. *Biomed Res Int.* **2015**;2015:601543
4. Iori E, ***Ruzzene M**, Zanin S, Sbrignadello S, Pinna LA, Tessari P. Effects of CK2 inhibition in cultured fibroblasts from Type 1 Diabetic patients with or without nephropathy. *Growth Factors.* **2015** Aug;33(4):259-66.
5. Kalathur M, Toso A, Chen J, Revandkar A, Danzer-Baltzer C, Guccini I, Alajati A, Sarti M, Pinton S, Brambilla L, Di Mitri D, Carbone G, Garcia-Escudero R, Padova A, Magnoni L, Tarditi A, Maccari L, Malusa F, Kalathur RK, A Pinna L, Cozza G, **Ruzzene M**, Delaleu N, Catapano CV, Frew IJ, Alimonti A. A chemogenomic screening identifies CK2 as a target for pro-senescence therapy in PTEN-deficient tumours. *Nat Commun.* **2015** Jun 18;6:7227.
6. Zanin S, Sandre M, Cozza G, Ottaviani D, Marin O, Pinna LA, ***Ruzzene M**. Chimeric peptides as modulators of CK2-dependent signaling: Mechanism of action and off-target effects. *Biochim Biophys Acta.* **2015** Oct;1854(10 Pt B):1694-1707.
7. Girardi C, James P, Zanin S, Pinna LA, **Ruzzene*** M. Differential phosphorylation of Akt1 and Akt2 by protein kinase CK2 may account for isoform specific functions. *Biochim Biophys Acta.* **2014**; 1843(9): 1865-1874
8. Venerando A, **Ruzzene*** M, Pinna LA. Casein kinase: the triple meaning of a misnomer. *Biochem J.* **2014**; 460(2): 141-156.
9. Cozza G, Zanin S, Determann R, **Ruzzene M**, Kunick C, Pinna LA. Synthesis and properties of a selective inhibitor of Homeodomain-Interacting Protein Kinase (HIPK2). *PLoS One.* **2014**; 9(2): e89176
10. Cozza G, Girardi C, Ranchio A, Lolli G, Sarno S, Orzeszko A, Kazimierczuk Z, Battistutta R, **Ruzzene M**, Pinna LA. Cell-permeable dual inhibitors of protein kinases CK2 and PIM-1: structural features and pharmacological potential. *Cell Mol Life Sci.* **2014**; 71(16): 3173-3185.
11. Shaik MM, Cendron L, Salamina M, **Ruzzene M**, Zanotti G. Helicobacter pylori periplasmic receptor CeuE (HP1561) modulates its nickel affinity via organic metallophores. *Mol Microbiol.* **2013**; 91(4): 724-735.

12. Quotti Tubi L, Gurrieri C, Brancalion A, Bonaldi L, Bertorelle R, Manni S, Pavan L, Lessi F, Zambello R, Trentin L, Adami F, **Ruzzene M**, Pinna LA, Semenzato G, Piazza F. Inhibition of protein kinase CK2 with the clinical-grade small ATP-competitive compound CX-4945 or by RNA interference unveils its role in acute myeloid leukemia cell survival, p53-dependent apoptosis and daunorubicin-induced cytotoxicity. *J Hematol Oncol.* **2013**; 6: 78-92.
13. Borgo C, Cesaro L, Salizzato V, **Ruzzene M**, Massimino ML, Pinna LA, Donella-Deana A. Aberrant signalling by protein kinase CK2 in imatinib-resistant chronic myeloid leukaemia cells: biochemical evidence and therapeutic perspectives. *Mol Oncol.* **2013**; 7(6): 1103-1115.
14. Venerando A, Girardi C, **Ruzzene M**, Pinna LA. Pyrvinium pamoate does not activate protein kinase CK1, but promotes Akt/PKB down-regulation and GSK3 activation. *Biochem J.* **2013**; 452(1): 131-137.
 - a. IF 4.779
15. Cozza G, Sarno S, **Ruzzene M**, Girardi C, Orzeszko A, Kazimierczuk Z, Zagotto G, Bonaiuto E, Di Paolo ML, Pinna LA. Exploiting the repertoire of CK2 inhibitors to target DYRK and PIM kinases. *Biochim Biophys Acta.* **2013**; 1834(7): 1402-1409.
16. Zanin S, Borgo C, Girardi C, O'Brien SE, Miyata Y, Pinna LA, Donella-Deana A, **Ruzzene*** M. Effects of the CK2 inhibitors CX-4945 and CX-5011 on drug-resistant cells. *PLoS One.* **2012**; 7(11): e49193.
17. Vallese F, Berto P, **Ruzzene M**, Cendron L, Sarno S, De Rosa E, Giacometti GM, Costantini P. Biochemical analysis of the interactions between the proteins involved in the [FeFe]-hydrogenase maturation process. *J Biol Chem.* **2012**; 287(43): 36544-36555.
18. Manni S, Brancalion A, Tubi LQ, Colpo A, Pavan L, Cabrelle A, Ave E, Zaffino F, Di Maira G, **Ruzzene M**, Adami F, Zambello R, Pitari MR, Tassone P, Pinna LA, Gurrieri C, Semenzato G, Piazza F. Protein kinase CK2 protects multiple myeloma cells from ER stress-induced apoptosis and from the cytotoxic effect of HSP90 inhibition through regulation of the unfolded protein response. *Clin Cancer Res.* **2012**; 18(7): 1888-1900.
19. Piazza F, Manni S, **Ruzzene M**, Pinna LA, Gurrieri C, Semenzato G. Protein kinase CK2 in hematologic malignancies: reliance on a pivotal cell survival regulator by oncogenic signaling pathways. *Leukemia.* **2012**; 26(6): 1174-1179.
20. **Ruzzene M**, Tosoni K, Zanin S, Cesaro L, Pinna LA. Protein kinase CK2 accumulation in "oncophilic" cells: causes and effects. *Mol Cell Biochem.* **2011**; 356(1-2): 5-10.
21. Tosoni K, Costa A, Sarno S, D'Alessandro S, Sparla F, Pinna LA, Zottini M, **Ruzzene*** M. The p23 co-chaperone protein is a novel substrate of CK2 in Arabidopsis. *Mol Cell Biochem.* **2011**; 356(1-2): 245-254.
22. Sarno S, Mazzorana M, Traynor R, **Ruzzene M**, Cozza G, Pagano MA, Meggio F, Zagotto G, Battistutta R, Pinna LA. 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.* **2012**; 69(3): 449-460.
23. Stahl S, Branca RM, Efazat G, **Ruzzene** M, Zhivotovsky B, Lewensohn R, Viktorsson K, Lehtio J. Phosphoproteomic profiling of NSCLC cells reveals that ephrin B3 regulates pro-survival signaling through Akt1-mediated phosphorylation of the EphA2 receptor. *J Proteome Res.* **2011**; 10(5): 2566-2578.
 24. Accordi B, Espina V, Giordan M, VanMeter A, Milani G, Galla L, **Ruzzene** M, Sciro M, Trentin L, De Maria R, te Kronnie G, Petricoin E, Liotta L, Basso G. Functional protein network activation mapping reveals new potential molecular drug targets for poor prognosis pediatric BCP-ALL. *PLoS One.* **2010**; 5(10): e13552.
 25. **Ruzzene** M, Di Maira G, Tosoni K, Pinna LA. Assessment of CK2 constitutive activity in cancer cells. *Methods Enzymol.* **2010**; 484: 495-514.
 26. Kreutzer JN, **Ruzzene** M, Guerra B. Enhancing chemosensitivity to gemcitabine via RNA interference targeting the catalytic subunits of protein kinase CK2 in human pancreatic cancer cells. *BMC Cancer.* **2010**; 10: 440-451.
 27. **Ruzzene** M, Pinna LA. Addiction to protein kinase CK2: a common denominator of diverse cancer cells? *Biochim Biophys Acta.* **2010**; 1804(3): 499-504.
 28. Di Maira G, Brustolon F, Pinna LA, **Ruzzene*** M. Dephosphorylation and inactivation of Akt/PKB is counteracted by protein kinase CK2 in HEK 293T cells. *Cell Mol Life Sci.* 2009; 66(20): 3363-3373.
 29. Cozza G, Mazzorana M, Papinutto E, Bain J, Elliott M, di Maira G, Gianoncelli A, Pagano MA, Sarno S, **Ruzzene** M, Battistutta R, Meggio F, Moro S, Zagotto G, Pinna LA. Quinalizarin as a potent, selective and cell-permeable inhibitor of protein kinase CK2. *Biochem J.* **2009**; 421(3): 387-395.
 30. Peggion C, Lopreiato R, Casanova E, **Ruzzene** M, Facchin S, Pinna LA, Carignani G, Sartori G. Phosphorylation of the *Saccharomyces cerevisiae* Grx4p glutaredoxin by the Bud32p kinase unveils a novel signaling pathway involving Sch9p, a yeast member of the Akt / PKB subfamily. *FEBS J.* **2008**; 275(23): 5919-5933.
 31. Cenni V, Bertacchini J, Beretti F, Lattanzi G, Bavelloni A, Riccio M, **Ruzzene** M, Marin O, Arrigoni G, Parnaik V, Wehnert M, Maraldi NM, de Pol A, Cocco L, Marmioli S. Lamin A Ser404 is a nuclear target of Akt phosphorylation in C2C12 cells. *J Proteome Res.* **2008**; 7(11): 4727-4735.
 32. Pagano MA, Bain J, Kazimierczuk Z, Sarno S, **Ruzzene** M, Di Maira G, Elliott M, Orzeszko A, Cozza G, Meggio F, Pinna LA. The selectivity of inhibitors of protein kinase CK2: an update. *Biochem J.* **2008**; 415(3): 353-365.
 33. Di Maira G, Brustolon F, Tosoni K, Belli S, Kramer SD, Pinna LA, **Ruzzene*** M. Comparative analysis of CK2 expression and function in tumor cell lines displaying sensitivity vs. resistance to chemical induced apoptosis. *Mol Cell Biochem.* **2008**; 316(1-2): 155-161.

34. Sacchi S, Bernasconi M, Martineau M, Mothet JP, Ruzzene M, Pilone MS, Pollegioni L, Molla G. pLG72 modulates intracellular D-serine levels through its interaction with D-amino acid oxidase: effect on schizophrenia susceptibility. *J Biol Chem.* **2008**; 283(32): 22244-22256.
35. Dal Pero F, Di Maira G, Marin O, Bortoletto G, Pinna LA, Alberti A, **Ruzzene M**, Gerotto M. Heterogeneity of CK2 phosphorylation sites in the NS5A protein of different hepatitis C virus genotypes. *J Hepatol.* **2007**; 47(6): 768-776.
36. Facchin* S, **Ruzzene*** M, Peggion C, Sartori G, Carignani G, Marin O, Brustolon F, Lopreiato R, Pinna LA. Phosphorylation and activation of the atypical kinase p53-related protein kinase (PRPK) by Akt/PKB. *Cell Mol Life Sci.* **2007**; 64(19-20): 2680-2689. *both first author
37. Di Maira G, Brustolon F, Bertacchini J, Tosoni K, Marmiroli S, Pinna LA, **Ruzzene*** M. Pharmacological inhibition of protein kinase CK2 reverts the multidrug resistance phenotype of a CEM cell line characterized by high CK2 level. *Oncogene.* **2007**; 26(48): 6915-6926.
38. Zottini M, Costa A, De Michele R, **Ruzzene M**, Carimi F, Lo Schiavo F. Salicylic acid activates nitric oxide synthesis in Arabidopsis. *J Exp Bot.* **2007**; 58(6): 1397-1405.
39. Pagano MA, Poletto G, Di Maira G, Cozza G, **Ruzzene M**, Sarno S, Bain J, Elliott M, Moro S, Zagotto G, Meggio F, Pinna LA. Tetrabromocinnamic acid (TBCA) and related compounds represent a new class of specific protein kinase CK2 inhibitors. *Chembiochem.* **2007**; 8(1): 129-139.
40. Piazza FA, **Ruzzene M**, Gurrieri C, Montini B, Bonanni L, Chioetto G, Di Maira G, Barbon F, Cabrelle A, Zambello R, Adami F, Trentin L, Pinna LA, Semenzato G. Multiple myeloma cell survival relies on high activity of protein kinase CK2. *Blood.* **2006**; 108(5): 1698-1707.
41. Sarno S, **Ruzzene M**, Frascella P, Pagano MA, Meggio F, Zambon A, Mazzorana M, Di Maira G, Lucchini V, Pinna LA. Development and exploitation of CK2 inhibitors. *Mol Cell Biochem.* **2005**; 274(1-2): 69-76.
42. Di Maira G, Salvi M, Arrigoni G, Marin O, Sarno S, Brustolon F, Pinna LA, **Ruzzene*** M. Protein kinase CK2 phosphorylates and upregulates Akt/PKB. *Cell Death Differ.* **2005**; 12(6): 668-677.
43. Barberis M, De Gioia L, **Ruzzene M**, Sarno S, Coccetti P, Fantucci P, Vanoni M, Alberghina L. The yeast cyclin-dependent kinase inhibitor Sic1 and mammalian p27Kip1 are functional homologues with a structurally conserved inhibitory domain. *Biochem J.* **2005**; 387(Pt 3): 639-647.
44. Pagano MA, Andrzejewska M, **Ruzzene M**, Sarno S, Cesaro L, Bain J, Elliott M, Meggio F, Kazimierczuk Z, Pinna LA. Optimization of protein kinase CK2 inhibitors derived from 4,5,6,7-tetrabromobenzimidazole. *J Med Chem.* **2004**; 47(25): 6239-6247.

45. Meggio F, Pagano MA, Moro S, Zagotto G, **Ruzzene M**, Sarno S, Cozza G, Bain J, Elliott M, Deana AD, Brunati AM, Pinna LA. Inhibition of protein kinase CK2 by condensed polyphenolic derivatives. An in vitro and in vivo study. *Biochemistry*. **2004**; 43(40): 12931-12936.
46. Pagano MA, Meggio F, **Ruzzene M**, Andrzejewska M, Kazimierczuk Z, Pinna LA. 2-Dimethylamino-4,5,6,7-tetrabromo-1H-benzimidazole: a novel powerful and selective inhibitor of protein kinase CK2. *Biochem Biophys Res Commun*. **2004**; 321(4): 1040-1044.
47. Lopreiato R, Facchin S, Sartori G, Arrigoni G, Casonato S, **Ruzzene M**, Pinna LA, Carignani G. Analysis of the interaction between piD261/Bud32, an evolutionarily conserved protein kinase of *Saccharomyces cerevisiae*, and the Grx4 glutaredoxin. *Biochem J*. **2004**; 377(Pt 2): 395-405.
48. Facchin S, Lopreiato R, **Ruzzene M**, Marin O, Sartori G, G^otz C, Montenarh M, Carignani G, Pinna LA. Functional homology between yeast piD261/Bud32 and human PRPK: both phosphorylate p53 and PRPK partially complements piD261/Bud32 deficiency. *FEBS Lett*. **2003**; 549(1-3): 63-66.
49. Sarno S, de Moliner E, **Ruzzene M**, Pagano MA, Battistutta R, Bain J, Fabbro D, Schoepfer J, Elliott M, Furet P, Meggio F, Zanotti G, Pinna LA. Biochemical and three-dimensional-structural study of the specific inhibition of protein kinase CK2 by [5-oxo-5,6-dihydroindolo-(1,2-a)quinazolin-7-yl]acetic acid (IQA). *Biochem J*. **2003**; 374(Pt 3): 639-646.
50. Donella-Deana A, Cesaro L, Sarno S, **Ruzzene M**, Brunati AM, Marin O, Vilk G, Doherty-Kirby A, Lajoie G, Litchfield DW, Pinna LA. Tyrosine phosphorylation of protein kinase CK2 by Src-related tyrosine kinases correlates with increased catalytic activity. *Biochem J*. **2003**; 372(Pt 3): 841-849.
51. **Ruzzene M**, Penzo D, Pinna LA. Protein kinase CK2 inhibitor 4,5,6,7-tetrabromobenzotriazole (TBB) induces apoptosis and caspase-dependent degradation of haematopoietic lineage cell-specific protein 1 (HS1) in Jurkat cells. *Biochem J*. **2002**; 364(Pt 1): 41-47.
52. Tuhackova Z, Vojtechova M, Hlavaceka J, **Ruzzene M**, Sovova V, Pinna LA. Increased activity of c-Src and Csk in fibroblasts transformed by v-src oncogene. *Biochem Biophys Res Commun*. **2002**; 290(2): 790-795.
53. Roher N, Sarno S, Miro F, **Ruzzene M**, Llorens F, Meggio F, Itarte E, Pinna LA, Plana M. The carboxy-terminal domain of Grp94 binds to protein kinase CK2 alpha but not to CK2 holoenzyme. *FEBS Lett*. **2001**; 505(1): 42-46.
54. Donella-Deana A, Cesaro L, Sarno S, Brunati AM, **Ruzzene M**, Pinna LA. Autocatalytic tyrosine-phosphorylation of protein kinase CK2 alpha and alpha' subunits: implication of Tyr182. *Biochem J*. **2001**; 357(Pt 2): 563-567.
55. Sarno S, Reddy H, Meggio F, **Ruzzene M**, Davies SP, Donella-Deana A, Shugar D, Pinna LA. Selectivity of 4,5,6,7-tetrabromobenzotriazole, an ATP site-directed inhibitor of protein kinase CK2 ('casein kinase-2'). *FEBS Lett*. **2001**; 496(1): 44-48.

56. Meggio F, Negro A, Sarno S, **Ruzzene** M, Bertoli A, Sorgato MC, Pinna LA. Bovine prion protein as a modulator of protein kinase CK2. *Biochem J.* **2000**; 352 Pt 1: 191-196.
57. **Ruzzene** M, Brunati AM, Sarno S, Marin O, Donella-Deana A, Pinna LA. Ser/Thr phosphorylation of hematopoietic specific protein 1 (HS1): implication of protein kinase CK2. *Eur J Biochem.* **2000**; 267(10): 3065-3072 (now FEBS J)
58. **Ruzzene** M, Brunati AM, Sarno S, Donella-Deana A, Pinna LA. Hematopoietic lineage cell specific protein 1 associates with and down-regulates protein kinase CK2. *FEBS Lett.* **1999**; 461(1-2): 32-36.
59. Meggio F, **Ruzzene** M, Sarno S, Pagano MA, Pinna LA. pCMB treatment reveals the essential role of cysteinyl residues in conferring functional competence to the regulatory subunit of protein kinase CK2. *Biochem Biophys Res Commun.* **2000**; 267(1): 427-432.
60. Marmiroli S, Bavelloni A, Faenza I, Sirri A, Ognibene A, Cenni V, Tsukada J, Koyama Y, **Ruzzene** M, Ferri A, Auron PE, Toker A, Maraldi NM. Phosphatidylinositol 3-kinase is recruited to a specific site in the activated IL-1 receptor I. *FEBS Lett.* **1998**; 438(1-2): 49-54.
61. Brunati AM, Pinna LA, Bergantino E, **Ruzzene** M, Cirri P, Ramponi G, Donella-Deana A. Src homology-2 domains protect phosphotyrosyl residues against enzymatic dephosphorylation. *Biochem Biophys Res Commun.* **1998**; 243(3): 700-705.
62. Donella-Deana A, Cesaro L, **Ruzzene** M, Brunati AM, Marin O, Pinna LA. Spontaneous autophosphorylation of Lyn tyrosine kinase at both its activation segment and C-terminal tail confers altered substrate specificity. *Biochemistry.* **1998**; 37(5): 1438-1446.
63. **Ruzzene** M, Songyang Z, Marin O, Donella-Deana A, Brunati AM, Guerra B, Agostinis P, Cantley LC, Pinna LA. Sequence specificity of C-terminal Src kinase (CSK)—a comparison with Src-related kinases c-Fgr and Lyn. *Eur J Biochem.* **1997**; 246(2): 433-439 (now FEBS J)
64. **Ruzzene** M, Brunati AM, Donella-Deana A, Marin O, Pinna LA. Specific stimulation of c-Fgr kinase by tyrosine-phosphorylated (poly)peptides—possible implication in the sequential mode of protein phosphorylation. *Eur J Biochem.* **1997**; 245(3): 701-707 (now FEBS J)
65. Pinna LA, **Ruzzene** M. How do protein kinases recognize their substrates? *Biochim Biophys Acta.* **1996**; 1314(3): 191-225.
66. Macino B, Zambon A, Milan G, Cabrelle A, **Ruzzene** M, Rosato A, Mandruzzato S, Quintieri L, Zanovello P, Collavo D. CD45 regulates apoptosis induced by extracellular adenosine triphosphate and cytotoxic T lymphocytes. *Biochem Biophys Res Commun.* **1996**; 226(3): 769-776.
67. Brunati AM, James P, Guerra B, **Ruzzene** M, Donella-Deana A, Pinna LA. The spleen protein-tyrosine kinase TPK-IIB is highly similar to the catalytic domain of p72syk. *Eur J Biochem.* **1996**; 240(2): 400-407 (now FEBS J)

68. **Ruzzene M**, Brunati AM, Marin O, Donella-Deana A, Pinna LA. SH2 domains mediate the sequential phosphorylation of HS1 protein by p72syk and Src-related protein tyrosine kinases. *Biochemistry*. **1996**; 35(16): 5327-5332.
69. Agostinis P, Donella-Deana A, Van Hoof C, Cesaro L, Brunati AM, **Ruzzene M**, Merlevede W, Pinna LA, Goris J. A comparative study of the phosphotyrosyl phosphatase specificity of protein phosphatase type 2A and phosphotyrosyl phosphatase type 1B using phosphopeptides and the phosphoproteins p50/HS1, c-Fgr and Lyn. *Eur J Biochem*. **1996**; 236(2): 548-557 (now FEBS J)
70. Donella-Deana A, James P, Staudenmann W, Cesaro L, Marin O, Brunati AM, **Ruzzene M**, Pinna LA. Isolation from spleen of a 57-kDa protein substrate of the tyrosine kinase Lyn. Identification as a protein related to protein disulfide-isomerase and localisation of the phosphorylation sites. *Eur J Biochem*. **1996**; 235(1-2): 18-25 (now FEBS J)
71. Meggio F, Donella Deana A, **Ruzzene M**, Brunati AM, Cesaro L, Guerra B, Meyer T, Mett H, Fabbro D, Furet P, et al. Different susceptibility of protein kinases to staurosporine inhibition. Kinetic studies and molecular bases for the resistance of protein kinase CK2. *Eur J Biochem*. **1995**; 234(1): 317-322 (now FEBS J)
72. Brunati AM, Donella-Deana A, **Ruzzene M**, Marin O, Pinna LA. Site specificity of p72syk protein tyrosine kinase: efficient phosphorylation of motifs recognized by Src homology 2 domains of the Src family. *FEBS Lett*. **1995**; 367(2): 149-152.
73. Brunati AM, **Ruzzene M**, James P, Guerra B, Pinna LA. Hierarchical phosphorylation of a 50-kDa protein by protein tyrosine kinases TPK-IIB and C-Fgr, and its identification as HS1 hematopoietic-lineage cell-specific protein. *Eur J Biochem*. **1995**; 229(1): 164-170 (now FEBS J)
74. **Ruzzene M**, James P, Brunati AM, Donella-Deana A, Pinna LA. Regulation of c-Fgr protein kinase by c-Src kinase (CSK) and by polycationic effectors. *J Biol Chem*. **1994**; 269(22): 15885-15891.
75. Caffieri S, **Ruzzene M**, Guerra B, Frank S, Vedaldi D, Dall'Acqua F. Psoralen-fatty acid cycloadducts activate protein kinase C (PKC) in human platelets. *J Photochem Photobiol B*. **1994**; 22(3): 253-256.
76. Donella-Deana A, Krinks MH, **Ruzzene M**, Klee C, Pinna LA. Dephosphorylation of phosphopeptides by calcineurin (protein phosphatase 2B). *Eur J Biochem*. **1994**; 219(1-2): 109-117 (now FEBS J)
77. Perich JW, **Ruzzene M**, Pinna LA, Reynolds EC. Efficient Fmoc/solid-phase peptide synthesis of O-phosphotyrosyl-containing peptides and their use as phosphatase substrates. *Int J Pept Protein Res*. **1994**; 43(1): 39-46 (now Chem Biol Drug Des)
78. **Ruzzene M**, Donella-Deana A, Marin O, Perich JW, Ruzza P, Borin G, Calderan A, Pinna LA. Specificity of T-cell protein tyrosine phosphatase toward phosphorylated synthetic peptides. *Eur J Biochem*. **1993**; 211(1-2): 289-295 (now FEBS J)

79. **Ruzzene M**, Vianello F, Donella-Deana A, Deana R. Purification and characterization of two casein kinases from ejaculated bovine spermatozoa. *J Biochem.* **1992**; 112(6): 768-774.
80. **Ruzzene M**, Francesconi M, Donella-Deana A, Alexandre A, Deana R. The antioxidant butylated hydroxytoluene (BHT) inhibits the dioctanoylglycerol-evoked platelet response but potentiates that elicited by ionomycin. *Arch Biochem Biophys.* **1992**; 294(2): 724-730.
81. **Ruzzene M**, Francesconi M, Cavallini L, Battistella L, Deana R. Inhibition of thrombin-induced platelet activation by dioctanoylglycerol pretreatment is not correlated with the 47 kDa protein phosphorylation. *Second Messengers Phosphoproteins.* **1992**; 14(1-2): 11-19.
82. Doni MG, Deana R, Padoin E, **Ruzzene M**, Alexandre A. Platelet activation by diacylglycerol or ionomycin is inhibited by nitroprusside. *Biochim Biophys Acta.* **1991**; 1094(3): 323-329.
83. **Ruzzene M**, Donella-Deana A, Alexandre A, Francesconi MA, Deana R. The antioxidant butylated hydroxytoluene stimulates platelet protein kinase C and inhibits subsequent protein phosphorylation induced by thrombin. *Biochim Biophys Acta.* **1991**; 1094(1): 121-129.
84. Cavallini L, Francesconi MA, **Ruzzene M**, Valente M, Deana R. A procedure allowing measurement of cytosolic Ca²⁺ in rat platelets. Inhibition of a plasma lipoprotein on fura 2-AM loading. *Thromb Res.* **1991**; 63(1): 47-57.
85. Zoccarato F, **Ruzzene M**, Cavallini L, Doni MG, Francesconi MA, Deana R, Alexandre A. Platelet responses promoted by the activation of protein kinase C or the increase of cytosolic Ca²⁺ are potentiated by adrenaline. Effects of cAMP and staurosporine. *Biochim Biophys Acta.* **1991**; 1092(1): 72-78.
86. Deana R, **Ruzzene M**, Doni MG, Zoccarato F, Alexandre A. Cyclic GMP and nitroprusside inhibit the activation of human platelets by fluoroaluminate. *Biochim Biophys Acta.* **1989**; 1014(2): 203-206.
87. Deana R, **Ruzzene M**, Cavallini L, Francesconi M, Rigoni F. Effects of calcium chelators, divalent cations and sulfhydryl reagents on calcium uptake and motility of bovine spermatozoa. *Cell Calcium.* **1988**; 9(3): 121-128.

Capitoli su libri

1. Girardi C, **Ruzzene M**. CK2 function in the regulation of Akt pathway (**2014**) in press in *Protein kinase CK2 cellular function in normal and disease states*, K. Ahmed, O.-G. Issinger, R. Szyszka eds, Springer
2. **Ruzzene M**. Addiction of cancer cells to CK2: survival at all costs or Achilles' heel? (**2012**) p. 305-318, in *Protein Kinase CK2*, Wiley-Blackwell, L.A. Pinna ed., Ames, Iowa, USA
3. **Ruzzene M**, Pinna LA. Assay of protein kinases and phosphatases using specific peptide substrates (**1999**) p. 221-253, in *Protein Phosphorylation (Second edition) A Practical Approach*, Oxford University Press, D.G. Hardie ed., Dundee, Scotland, UK

4. **Ruzzene** M, Lorenzen JA, Donella-Deana A, Marin O, Perich JW, Fischer EH, Pinna LA. Specificity of the truncated form of human T-cell protein tyrosine phosphatase toward phosphorylated synthetic peptides (**1993**) p. 107-110, in NATO ASI Series Vol. H, Tyrosine Phosphorylation /Dephosphorylation and Downstream Signalling, L.M.G. Heilmeyer Jr ed., Sperling-Verlag Berlin Heidelberg, Germany
5. Donella-Deana A, Brunati AM, **Ruzzene** M, Pinna LA. Polylysine activates a splenic tyrosine kinase encoded by fgr protooncogene (**1993**) p. 135-138, in NATO ASI Series Vol. H, Tyrosine Phosphorylation /Dephosphorylation and Downstream Signalling, L.M.G. Heilmeyer Jr ed., Sperling-Verlag Berlin Heidelberg, Germany

Bibliometric indications

As of January, 2016, Maria Ruzzene has published 87 full-length peer-reviewed papers in international scientific journals indexed on the PubMed.

H-index: 30 according to ISI Web of Science; 33 according to Google Scholar.

Sum of the times cited: 3322 according to ISI Web of Science; 4315 according to Google Scholar.