

## Curriculum vitae et studiorum della Prof. Marisa Brini

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Scopus Author ID: 7004116679

### Biografia:

1985: Maturità scientifica

1990: Laurea in Scienze Biologiche con il massimo dei voti e la lode presso l'Università degli Studi di Padova.

Titolo della Tesi: *Analisi molecolare dei geni a codifica nucleare della citocromo c ossidasi di Dictyostelium discoideum.*

1991-1992: Tirocinio Pratico post lauream.

1992: Esame di Stato per l'Abilitazione alla Professione di Biologo.

1991-1995: Dottorato di Ricerca in Biologia e Patologia Molecolare e Cellulare dell'Università di Padova, presso il laboratorio diretto dal Prof. T. Pozzan, Dipartimento di Scienze Biomediche Sperimentali.

1996: Conseguimento del Titolo di Dottore di Ricerca in Biologia e Patologia Molecolare e Cellulare.

Titolo della Tesi: *Espressione ricombinante e direzionamento specifico delle proteine equorina e "green fluorescent protein" (GFP) di Aequorea victoria. Un nuovo approccio allo studio di processi fisiologici in cellule viventi.*

1998-2011: Ricercatore Universitario (SSD BIO/10 – Biochimica) presso la Facoltà di Medicina Veterinaria dell'Università degli Studi di Padova (confermato dal 2001).

2011-oggi: Professore Associato (SSD BIO/10 – Biochimica) presso il Dipartimento di Biomedicina Comparata ed Alimentazione prima (2011-2013) e presso il Dipartimento di Biologia poi (1 Ottobre 2013-oggi) dell'Università degli Studi di Padova.

2012: Abilitazione Nazionale a Professore Ordinario I fascia (settore disciplinare 05E1-Biochimica)

2016: Abilitazione Nazionale a Professore Ordinario I fascia (settore disciplinare 05E1-Biochimica)

### Borse di Studio e Premi:

1990: Premio per il progetto di tesi di laurea offerto dal Consorzio Padova Ricerche.

1996: Borsa di studio sul contratto RG-520/95 M tra "International Human frontier Science Program" di Strasburgo, Francia e l'Università di Padova su "Controllo dei meccanismi che regolano l'omeostasi del Ca<sup>2+</sup> intracellulare", sotto la direzione scientifica del Prof. T. Pozzan.

1996-1998: Borsa di studio biennale bandita dal Comitato Promotore Telethon su un progetto intitolato "Nuclear calpain in cell death with special attention to the development of muscular dystrophy", sotto la direzione scientifica del Prof. E. Carafoli.

2001: Premio "Fondazione Dott. Giuseppe Borgia" per le Scienze Biologiche della Accademia Nazionale dei Lincei.

2003: 1° Premio per l'Innovazione StartCUP 2003 promosso dall'Università di Padova e finanziato dalla Cassa di Risparmio di Padova e Rovigo.

### Attività di ricerca:

1989-1991: nel laboratorio del Prof. R. Bisson, biologia molecolare dell'enzima citocromo c ossidasi eucariotica, in particolare analisi dell'enzima nel sistema modello *D.discoideum*.

1991-1996: nel laboratorio del Prof. T. Pozzan, uso dell'equorina (fotoproteina  $\text{Ca}^{2+}$ -sensibile) per la misura della concentrazione intracellulare del  $\text{Ca}^{2+}$ ; costruzione di cDNA chimerici che permettono l'espressione di equorine ricombinanti direzionate ai diversi organuli cellulari e loro uso per l'analisi subcellulare dell'omeostasi del  $\text{Ca}^{2+}$ ; costruzione di GFP (Green Fluorescent Protein) ricombinanti a destino intracellulare specifico per la localizzazione e lo studio della interazione degli organelli subcellulari in cellule di mammifero.

1996-1998: nel laboratorio del Prof. E. Carafoli, espressione ricombinante in cellule di mammifero delle isoforme della calpaina, una cistein proteasi  $\text{Ca}^{2+}$  dipendente, e studio della sua localizzazione e funzione in cellule viventi. Caratterizzazione funzionale della isoforma muscolo specifica p94 della calpaina e studio del suo ruolo nella distrofia muscolare dei cingoli.

1998-oggi: Analisi subcellulare dell'omeostasi del  $\text{Ca}^{2+}$  con sonde ricombinanti; il segnale  $\text{Ca}^{2+}$  nei mitocondri ed il suo ruolo nel controllo del metabolismo aerobio; i meccanismi patogenetici delle malattie mitocondriali. Analisi funzionale dei sistemi di trasporto dello ione  $\text{Ca}^{2+}$  in cellule vive, in particolare delle diverse isoforme della  $\text{Ca}^{2+}$ -ATPasi della membrana plasmatica e degli effetti sull'omeostasi del  $\text{Ca}^{2+}$  di mutazioni associate a sordità genetica e atassia cerebellare. Analisi delle alterazioni dell'omeostasi del  $\text{Ca}^{2+}$  in linee cellulari modello per patologie neuromuscolari e neurodegenerative.

Analisi del metabolismo mitocondriale in modelli cellulari che esprimono forme native e mutate di proteine responsabili di forme familiari di morbo di Parkinson.

#### **Attività di coordinamento della ricerca:**

Dal 1998 la Dr.ssa Brini coordina un gruppo di ricerca costituito mediamente da due Post-Doc o Assegnisti di Ricerca, due studenti di Dottorato di ricerca, uno o due studenti in tirocinio di laurea.

#### **Attività didattica:**

Presso la Facoltà di Medicina e Chirurgia della Università di Padova, la Dr. Brini, negli anni 1991-1995 ha partecipato, in qualità di cultore della materia, all'allestimento dei laboratori sperimentali e alla istruzione degli studenti durante le esercitazioni pratiche di Biologia Molecolare, di Biochimica e di Patologia Generale organizzate rispettivamente dal Prof. R. Bisson e dal Dr. R. Rizzuto.

Nell'anno accademico 1998/99, in qualità di ricercatore della Facoltà di Medicina Veterinaria della Università di Padova, ha tenuto cicli di esercitazioni teorico-pratiche nell'ambito dei corsi integrati 2.1, Chimica e Propedeutica Biochimica, e 2.2, Biochimica Veterinaria Sistemica e Comparata nel corso di Laurea in Medicina Veterinaria. Ha tenuto inoltre il Modulo di didattica pratica dell'Area 2, Chimica e Biochimica.

Nell'anno accademico 1999/2000 la Dr. Brini ha avuto l'affidamento dell'insegnamento di Biochimica Veterinaria Sistemica e Comparata II (c.i. 2.2) e dell'insegnamento di Metodologie e Biotecnologie Biochimiche e Chimiche Veterinarie nel Corso di Laurea in Medicina Veterinaria.

Nell'anno accademico 2000/2001 la Dr. Brini ha avuto l'affidamento dell'insegnamento di Biochimica Veterinaria Sistemica e Comparata II (c.i. 2.2) nel Corso di Laurea in Medicina Veterinaria.

Negli anni accademici 2001/2002 e 2002/2003 la Dr. Brini ha avuto l'affidamento dell'insegnamento di Principi di Biochimica (c.i. 2) nei Corsi di Laurea in Scienze e Tecnologie Animali della Facoltà di Agraria e Medicina Veterinaria e in Sicurezza Igienico-sanitaria degli Alimenti della Facoltà di Medicina Veterinaria.

Dall'anno accademico 2003/2004 all'anno accademico 2006/2007 la Dr. Brini ha avuto l'affidamento del corso integrato di Chimica Generale e Principi di Biochimica (c.i. 2) nei Corsi di Laurea in Scienze e Tecnologie Animali della Facoltà di Agraria e Medicina Veterinaria e in Sicurezza Igienico-sanitaria degli Alimenti della Facoltà di Medicina Veterinaria.

Dall'anno accademico 2008/2009 all'anno accademico 2013/2014 la Dr. Brini ha l'affidamento dell'insegnamento di Biologia Molecolare (4 CFU) nell'ambito del corso integrato di Biologia Molecolare, Zoologia, Istologia ed Embriologia Veterinaria, e dell'insegnamento di Biochimica 3CFU (già Laboratorio di Tecniche Biomolecolari) nell'ambito del corso integrato di Biochimica (13 CFU) per il corso di Laurea in Medicina Veterinaria dell'Università di Padova.

Dall'anno accademico 2013/2014 ad oggi la Dr. Brini ha l'affidamento del modulo di Biochimica 1 (7 CFU) del corso integrato di Biochimica (13 CFU) del corso di studi in Biologia dell'Università degli Studi di Padova.

Dall'anno accademico 2014/2015 ad oggi la Dr. Brini ha l'affidamento del modulo di Biochimica 1 (6 CFU) del corso integrato di Biochimica (12 CFU) del corso di studi in Biotecnologie dell'Università degli Studi di Padova.

Dall'anno accademico 2003/2004 all'anno accademico 2012/2013 la Dr.ssa Brini è il docente responsabile per la Lingua Inglese della Facoltà di Medicina Veterinaria e rappresentata della Facoltà presso il Centro Linguistico di Ateneo.

Dall'anno accademico 2000/2001 all'anno accademico 2012/2013 la Dr. Brini fa parte del Collegio Docenti del Dottorato di ricerca in "Medicina degli Animali", oggi Scuola di Dottorato in Scienze Veterinarie della Facoltà di Medicina Veterinaria dell'Università di Padova

Dall'anno accademico 2014/2015 la Dr. ssa Brini fa parte del Collegio Docenti del Dottorato di ricerca in "Bioscienze" dell'Università degli Studi di Padova.

A partire dall'anno accademico 1999/2000, la Dr. Brini è responsabile (in qualità di correlatore e di relatore) del lavoro di tesi di studenti dei corsi di laurea triennali e magistrali in Scienze Biologiche, in Biologia Molecolare, in Biotecnologie Sanitarie, in Farmacia, in Chimica e Tecnologia Farmaceutiche, in Biologia, in Biotecnologie, in Biologia Sanitaria.

### **Corsi:**

7-12 Giugno 1993: Corso Pratico EMBO su "Microinjection and Electrotransfection of Cells", European Molecular Biology Laboratory, Heidelberg, Germany.

18-23 Giugno 1995: Gordon Research Conference on Calcium Signalling, New England College, Henniker, NH, USA.

7-12 Settembre 1997: Gordon Research Conference on Calcium Signalling, The Queen's College, Oxford, UK.

8-13 Agosto 1999: Gordon Research Conference on Calcium Signalling, New England College, Henniker, NH, USA.

28 Agosto-3 Settembre 2000: FEBS Advanced Lecture Course on P-type ATPases, Familienferiendorf Mauloff, Weilrod-Taunus, Germany.

2-7 Settembre 2001: Gordon Research Conference on Calcium Signalling, The Queen's College, Oxford, UK.

21-26 Giugno 2009: Gordon Research Conference on Calcium Signalling, Il Ciocco, Barga (LU), Italy

26 Giugno-1 Luglio 2011: Gordon Research Conference on Calcium Signalling, Colby College, Waterville, MN, USA

16-21 Giugno 2013: Gordon Research Conference on Calcium Signalling, Il Ciocco, Barga (LU), Italy

18-23 Giugno 2017: Gordon Research Conference on Calcium Signalling, Il Ciocco, Barga (LU), Italy

### **Editoriale:**

La Dr. Brini svolge attività di revisore per riviste internazionali (Nature, J. Cell Biol., EMBO J., J. Neurochem., Biophysical Biochimica Acta, J. Biol. Chem., Cell Calcium, J. Exp. Biol., FEBS etc.) e per diverse agenzie di finanziamento nazionali e internazionali quali: VQR 2004-2010 Gev05; PRIN 2012; French National Research Agency (ANR); Wellcome Trust (UK); National Science Centre (Narodowe Centrum Nauki – NCN; Poland); AICR (UK); Tiroler Wissenschaftsfonds (Austria); Israeli Ministry of Science (Israel), etc.

Ha partecipato con una lezione su “Monitoring Ca<sup>2+</sup> concentration in living cells,, alla realizzazione di una serie di CD su “Calcium Signalling” edita da Henry Stewart Talks (2007). Brini, M. (2007), "Monitoring Ca<sup>2+</sup> Concentration in Living Cells", in Simpson, A. (ed.), *Calcium Signaling: Regulation, Mechanisms, Effectors, Role in Disease and Recent Advances*, The Biomedical & Life Sciences Collection, Henry Stewart Talks Ltd, London (online at <http://hstalks.com/bio>)

Ha curato (insieme al Prof. E. Carafoli) l'edizione di un libro a diffusione internazionale: “Calcium signalling and disease”, *Subcellular Biochemistry*, vol. 45 (2007), Springer, di un Volume della rivista *Biofactors* su “Calcium Signaling and disease” (vol. 37 2011) e di un Volume della rivista *Neurosciences Letters* su “Calcium Pumps and Exchangers in Neuronal Injury and Neurodegeneration” (2017), Elsevier.

2012: valutatore GEV05 VQR 2004- 2010

2016: valutatore GEV6 VQR2011-2014

### **Brevetti e Spin off:**

2005: Socio fondatore Aequotech SRL (spin off dell'Università di Ferrara, [www.aequotech.com](http://www.aequotech.com)) dal 15-03-2005 al 20-12-2014

2005: Brevetto internazionale: Metodo per la rilevazione di parametri intracellulari con sonde proteiche luminescenti per lo screening di molecole in grado di alterare detti parametri  
METHOD FOR THE DETECTION OF INTRACELLULAR PARAMETERS WITH LUMINESCENT PROTEIN PROBES FOR THE SCREENING OF MOLECULES CAPABLE OF ALTERING SAID PARAMETERS  
(Numero identificativo internazionale: WO 2005/093429) dal 23-03-2005 al 16-09-2011

2017: Brevetto nazionale: Identificazione di interazioni tra organelli subcellulari mediante splitGFP (Numero presentazione domanda in data 10/7/2017: 102017000077259)

International patent: Domanda di brevetto internazionale N. PCT/IB2018/055063 del 10 Luglio 2018  
Università degli Studi Di Padova  
Identificazioni Di Interazioni Tra Organelli Subcellulari Mediante Split GFP  
(ITALIA - N. 102017000077259)

## **ELENCO DELLE PUBBLICAZIONI**

### **A- Lavori in extenso su riviste internazionali:**

1. Rizzuto, R., Sandonà, D., **Brini, M.**, Capaldi, R.A. & Bisson, R.: The most conserved nuclear-encoded polypeptide of cytochrome c oxidase is the putative zinc-binding subunit: primary structure of subunit V from the slime mold *Dictyostelium discoideum*. *Biochim. Biophys. Acta* (1991) 1129, 100-104.
2. Piccolo, G., Azan, G., Banfi, P., Sandonà, D., **Brini, M.**, Bisson, R. & Rizzuto, R.: Clinical, morphological and molecular genetic studies in patients with progressive external ophthalmoplegia and mitochondrial myopathy. *Ital. J. Neurol. Sci.* (1992) Suppl.1, 91-94.
3. Rizzuto, R., Simpson, A.W.M., **Brini, M.** & Pozzan, T.: Rapid changes of mitochondrial  $Ca^{2+}$  revealed by specifically targeted recombinant aequorin. *Nature* (1992) 358, 325-328.
4. Rizzuto, R., Sandonà, D., **Brini, M.**, Marschalek, R., Dingermann, T. & Bisson, R.: Structure of the promoter region of the gene encoding cytochrome c oxidase subunit V in *Dictyostelium*. *Eur. J. Biochem.* (1993), 211, 411-414.
5. Rizzuto, R., **Brini, M.** & Pozzan, T.: Intracellular targeting of the photoprotein aequorin: a new approach for measuring, in living cells,  $Ca^{2+}$  concentrations in defined cellular compartments. *Cytotechnology* (1993), 11, 44-46.
6. Volpe, P., Gorza, L., **Brini, M.**, Sacchetto, R., Ausoni, S. & Clegg, D. : Expression of the calsequestrin gene in chicken cerebellum Purkinje neurons. *Biochem. J.* (1993), 294, 487-490.
7. Rizzuto, R., **Brini, M.**, Murgia, M. & Pozzan, T. : Microdomains of high  $Ca^{2+}$  close to inositol-triphosphate sensitive channels are sensed by neighboring mitochondria. *Science* (1993), 262, 744-747.
8. **Brini, M.**, Murgia, M., Pasti, L., Picard, D., Pozzan, T. & Rizzuto, R. : Nuclear  $Ca^{2+}$  concentration measured with specifically targeted recombinant aequorin. *EMBO J.* (1993), 12, 4813-4819.
9. Cantini, M., Massimino, M.L., Catani, C., Rizzuto, R., **Brini, M.** & Carraro, U. : Gene transfer into satellite cell from regenerating muscle: Bupivacaine allows  $\beta$ -GAL transfection and expression in vitro and in vivo. *In Vitro Cellular & Developmental Biology* (1994), 30A, 131-133.
10. Rizzuto, R., **Brini, M.** & Pozzan, T.: Targeting recombinant aequorin to specific intracellular organelles. *Methods in Cell. Biol.* (1994), 40, 339-358.
11. **Brini, M.**, Pasti, L., Bastianutto, C., Murgia, M., Pozzan, T. & Rizzuto, R. : Targeting of aequorin for calcium monitoring in intracellular compartments. *J. Biolumin. Chemilumin.* (1994), 9, 177-184.
12. Murgia, M., Mion, M., Veronese, L., Panozzo, M., Rizzuto, R., **Brini, M.**, Malavasi, F., Amadori, A., Chieco Bianchi, L. & Pozzan, T. : Cytosolic free calcium concentration in the mitogenic stimulation of T lymphocytes by anti-CD3 monoclonal antibodies. *Cell Calcium* (1994), 16, 167-180.
13. Rizzuto, R., Bastianutto, C., **Brini, M.**, Murgia, M. & Pozzan, T.: Mitochondrial  $Ca^{2+}$  homeostasis in intact cells. *J. Cell Biol.* (1994), 126, 1183-1194.

14. **Brini, M.**, Marsault, R., Bastianutto, C., Pozzan, T. & Rizzuto, R.: Nuclear targeting of aequorin. A new approach for measuring nuclear  $\text{Ca}^{2+}$  concentration in intact cells. *Cell Calcium* (1994), 16, 259-268.
15. Rizzuto, R., **Brini, M.**, Bastianutto, C., Marsault, R. & Pozzan, T.: Photoprotein mediated measurement of  $[\text{Ca}^{2+}]$  in mitochondria of living cells. *Meth. in Enzymology* (1995) , 260, 417-428
16. **Brini, M.**, Marsault, R., Bastianutto, C., Alvarez, J., Pozzan, T. & Rizzuto, R.: Transfected aequorin in the measurement of cytosolic  $\text{Ca}^{2+}$  concentration ( $[\text{Ca}^{2+}]$ ) : a critical evaluation. *J. Biol. Chem.* (1995), 270, 9896-9903.
17. Rizzuto, R., **Brini, M.**, Pizzo, P., Murgia, M. & Pozzan, T. : Chimeric green fluorescence protein (GFP): a new tool for visualizing subcellular organelles in living cells. *Current Biology* (1995), 5, 635-642.
18. Montero, M., **Brini, M.**, Marsault, R., Alvarez, J., Sitia, R., Pozzan, T. & Rizzuto, R.: Monitoring dynamic changes in free  $\text{Ca}^{2+}$  concentration in the endoplasmic reticulum of intact cells. *EMBO J.* (1995), 14, 5467-5475.
19. Rizzuto, R., **Brini, M.**, De Giorgi, F., Rossi, R., Heim, R., Tsien, R.Y. & Pozzan, T.: Double labelling in vivo of subcellular structures with organelle-targeted GFP mutants. *Current Biology* (1996), 6, 183-188.
20. De Giorgi, F., **Brini, M.**, Bastianutto, C., Marsault, R., Montero, M., Pizzo, P., Rossi, R. & Rizzuto, R.: Targeting aequorin and green fluorescent protein to intracellular organelles. *Gene* (1996), 173, 113-117.
21. Rutter, G.A, Burnett, P., Rizzuto, R., **Brini, M.**, Murgia, M., Pozzan, T., Tavaré, J.M. & Denton, R.M.: Subcellular imaging of intramitochondrial  $\text{Ca}^{2+}$  with recombinant target aequorin. *Proc. Natl. Acad. Sci. USA* (1996) 93, 5489-5494
22. **Brini, M.**, De Giorgi, F., Murgia, M., Marsault, R., Massimino, M. L., Cantini, M., Rizzuto, R. & Pozzan, T.: Subcellular analysis of  $\text{Ca}^{2+}$  homeostasis in primary cultures of skeletal muscle myotubes. *Mol. Biol. of the Cell* (1997), 8, 129-143.
23. Szabo, I., Bãthori, G., Tombola, F., **Brini, M.**, Coppola, A. & Zoratti, M. : DNA translocation across planar bilayers containing *Bacillus subtilis* ion channels. *J. Biol. Chem.* (1997), 272, 25275-25282.
24. Szabo, I., Bãthori, G., Tombola, F., Coppola, A., Schmehl, I, **Brini, M.**, Ghazi, A., De Pinto, V. & Zoratti, M. : Double-stranded DNA can be translocated across a planar membrane containing purified mitochondrial porin. *FASEB J.* (1998), 12, 495-502.
25. Pinton, P., **Brini, M.**, Bastianutto, C., Tuft, R.A., Pozzan, T. And Rizzuto, R. : New light on mitochondrial calcium. *Biofactors* (1998), 8, 243-253.
26. De Giorgi, F., Ahmed, Z., Bastianutto, C., **Brini, M.**, Jouaville, L.S., Marsault, R., Murgia, M., Pinton, P., Pozzan, T. & Rizzuto, R. : Targeting GFP to organelles. *Meth. in Cell. Biol.* (1999), 58, 75-85.
27. Petronilli, V., Miotto, G., Canton, M., **Brini, M.**, Colonna, R., Bernardi, P. & Di Lisa, F. : Transient and long lasting openings of the mitochondrial permeability transition pore can be

- monitored directly in intact cells by mitochondrial calcein release. *Biophys. J* (1999), 76, 725-734.
28. **Brini, M.**, Pinton, P., Pozzan, T. & Rizzuto, R. : Targeted recombinant aequorins: tools for monitoring  $[Ca^{2+}]$  in the various compartments of a living cell. *Micros. Res. Tec.* (1999), 46, 380-389.
29. **Brini, M.**, Pinton, P., King, M.P., Davidson, M., Schon, E. A. & Rizzuto, R.: A calcium signalling defect in the pathogenesis of a mtDNA-inherited oxidative phosphorylation deficiency. *Nature Med.* (1999), 5, 951-954.
30. Branca, D., Gugliucci, A., Bano, D., **Brini, M.** & Carafoli, E. : Expression, partial purification and functional properties of the muscle-specific calpain isoform p94. *Eur. J. Bioch.* (1999), 265, 839-846.
31. Rizzuto, R. Pinton, P., **Brini, M.**, Chiesa, A., Filippin, L. & Pozzan, T.: Mitochondria as biosensors of calcium microdomains. *Cell Calcium* (1999), 26, 193-199.
32. **Brini, M** & Carafoli, E.: Calcium signalling: an historical account, recent developments and future perspectives. *Cell. Mol. Life Sci.* (2000), 57, 354-370.
33. Carafoli, E. & **Brini, M.**: Calcium Pumps. Structural basis for and mechanism of calcium transmembrane transport. *Current Opinion in Chem. Biol.* (2000), 4, 152-161.
34. **Brini, M.**, Bano, D., Manni, S., Rizzuto, R. & Carafoli, E.: Effects of PMCA and SERCA pump overexpression on the kinetics of cell  $Ca^{2+}$  signalling. *EMBO J.* (2000), 19, 4926-4935.
35. Carafoli, E., Santella, L. Branca, D. & **Brini, M.**: Generation, control, and processing of cellular calcium signals. *Crit. Rev. Biochem. Mol.* (2001), 36, 107-260.
36. Chami, M., Gozuacik, D., Lagorce, D., **Brini, M.**, Falson, P., Peaucellier, G., Pinton, P., Lecoq, H., Gougeon, M.-L., Le Maire, M., Rizzuto, R., Bréchet, C. & Paterlini-Bréchet, P.: SERCA1 truncated proteins unable to pump calcium reduce the ER calcium concentration and induce apoptosis. *J. Cell. Biol.* (2001), 153, 1301-1313.
37. Navazio, L., Moscattello, R., Bellincampi, D., Baldan B., Meggio, F., **Brini, M.**, Bowler, C., & Mariani, P.: The role of calcium in oligogalacturonide-activated signalling in soybean cells. *Planta* (2002) 215, 596-605.
38. **Brini, M.**, Manni, S., & Carafoli, E.: Recombinant expression of the plasma membrane  $Na^+/Ca^{2+}$  exchanger affects local and global  $Ca^{2+}$  homeostasis in chinese hamster ovary cells. *J. Biol. Chem.* (2002), 277, 38693-38699.
39. **Brini, M.**, Manni, S., & Carafoli, E.: A study of the activity of the plasma membrane  $Na/Ca$  exchanger in the cellular environment. *Ann. N.Y. Acad. Sci. New York Academy of Sciences* (2002) 976, 376-381.
40. **Brini, M.**, Coletto, L., Pierobon, N., Kraev, N., Guerini, D., & Carafoli, E.: A comparative functional analysis of plasma membrane  $Ca^{2+}$  pump isoforms in intact cells. *J. Biol. Chem.* (2003), 278, 24500-24508.

41. **Brini, M.:** Ca<sup>2+</sup> signalling in mitochondria: mechanism and role in physiology and pathology. *Cell Calcium* (2003), 34, 399-405.
42. **Brini, M.:** Ryanodine Receptor defects in muscle genetic diseases. *Biochem. Biophys. Res. Comm.* (2004), 322, 1245-1255.
43. **Brini, M.,** Manni, S., Pierobon, N., Du, G.G., Sharma, P., MacLennan, D.H., & Carafoli, E.: Ca<sup>2+</sup> signaling in HEK-293 and skeletal muscle cells expressing recombinant ryanodine receptors harbouring malignant hyperthermia and central core disease mutations. *J. Biol. Chem.* (2005), 280, 15380-15389.
44. **Brini, M.,** Miuzzo, M., Pierobon, N., Negro, A. & Sorgato, M.C.: The Prion Protein and its Parologue Doppel Affect Calcium Signalling in CHO Cells. *Mol. Biol. of the Cell* (2005), 16, 2799-2808.
45. Leo, S., Bianchi, K., **Brini, M.,** Rizzuto, R.: Mitochondrial calcium signalling in cell death. *FEBS J.* (2005), 272, 4013-4022.
46. Rimessi, A., Coletto, L., Pinton, P., Rizzuto, R., **Brini, M.,** Carafoli, E.: Inhibitory interaction of protein 14-3-3  $\epsilon$  with isoform 4 of the plasma membrane Ca<sup>2+</sup> pump. *J. Biol. Chem.* (2005), 280, 37195-37203.
47. Pulina, M.V., Rizzuto R., **Brini, M.,** Carafoli, E.: Inhibitory interaction of the plasma membrane Na<sup>+</sup>/Ca<sup>2+</sup> - exchangers with the 14-3-3 proteins. *J. Biol. Chem.* (2006), 281, 19645-19654.
48. Ficarella R, Di Leva F, Bortolozzi M, Ortolano S, Donaudy F, Petrillo M, Melchionda S, Lelli A, Domi T, Fedrizzi L, Lim D, Shull GE, Gasparini P, **Brini M\***, Mammano F, Carafoli E. : A functional study of plasma-membrane calcium-pump isoform 2 mutants causing digenic deafness. *Proc Natl Acad Sci U S A.* (2007), 104, 1516-1521. **\*Co-Corresponding Author**
49. Domi, T., Di Leva, F., Fedrizzi, L. , Rimessi, A. **Brini, M.:** Functional specificity of PMCA isoforms? *Ann. N.Y. Acad. Sci. New York Academy of Sciences* (2007), 1099, 237-246.
50. **Brini, M.,** Di Leva, F., Domi, T., Fedrizzi, L., Lim, D., Carafoli, E.: Plasma membrane calcium pumps and hereditary deafness *Biochem. Soc. Trans.* (2007), 35(Pt 5):913-918
51. Lim, D. Fedrizzi, L., Tartari, M., Zuccato, C., Cattaneo, E., **Brini, M.,** Carafoli, E.: Calcium homeostasis and mitochondrial dysfunction in striatal neurons of Huntington's disease. *J. Biol. Chem.* (2008), 283, 5780-5789.
52. Linde, I.C., Di Leva, F., Domi, T., Tosatto, S.E., **Brini, M. \***, Carafoli, E.: Inhibitory interaction of the 14-3-3 proteins with ubiquitous (PMCA1) and tissue specific (PMCA3) isoforms of the plasma membrane Ca<sup>2+</sup> pump. *Cell Calcium* (2008), 43, 550-561. **\*Co-Corresponding Author**
53. Spiden, S.L., Bortolozzi, M., Di Leva, F., de Angelis, M.H., Fuchs, H., Lim, D., Ortolano, S., Ingham, N.J. **Brini, M.\***, Carafoli, E., Mammano, F., Steel, K.P.: The Novel Mouse Mutation *Oblivion* Inactivates the PMCA2 Pump and Causes Progressive Hearing Loss. *PLoS Genetic* (2008), Oct;4(10):e1000238. Epub 2008 Oct 31. **\*Co-Corresponding Author**
54. Fedrizzi, L., Lim, D. Carafoli, E., **Brini, M.** Interplay of the Ca<sup>2+</sup>-binding protein DREAM with presenilin in neuronal Ca<sup>2+</sup> signaling. *J Biol. Chem.* (2008), 283, 27494-27503.



55. **Brini, M.:** Ca<sup>2+</sup>-sensitive photoproteins. *Methods* (2008), 46, 160-166.
56. **Brini, M.:** Plasma membrane Ca<sup>2+</sup>-ATPase: from a housekeeping function to a versatile signaling role. *Pflugers Archiv-Eur. J. Physiol.* (2009), 457,657-664.
57. Celsi, F. , Pizzo, P., **Brini, M.**, Leo, S., Fotino, C., Pinton, P., Rizzuto, R.: Mitochondria, calcium and cell death: a deadly triad in neurodegeneration. *Bioch. Biophys. Acta* (2009), 1787, 335-344.
58. **Brini M.**, Carafoli, E. Calcium pumps in health and disease. *Physiol. Rev.* (2009), 89, 1341-1378.
59. **Brini M.**, Di Leva F., Claudia K. Ortega, C.K., Domi, T., Ottolini, D., Leonardi, E., Tosatto, S.C.E., Carafoli, E. Deletions and Mutations in the Acidic Lipid-binding Region of the Plasma membrane Ca<sup>2+</sup> pump: a study on different splicing variants of isoform 2. *J Biol. Chem.* (2010), 285, 30779-91.
60. Jiang, L., Allagnat, F., Nguidjoe, E., Kamagate, A., Pachera, N., Vanderwinden, J.M., **Brini, M.**, Carafoli, E., Eizirik, D.L., Cardozo, A.K., Herchuelz, A. Plasma membrane Ca<sup>2+</sup>-ATPase overexpression depletes both mitochondrial and endoplasmic reticulum Ca<sup>2+</sup> stores and triggers pancreatic  $\beta$ -cell apoptosis. *J Biol. Chem.* (2010), 285, 30634-43.
61. Bortolozzi, M.; **Brini, M.** \*, Parkinson N., Crispino, G., Scimemi, P., De Siatì, R.D., Di Leva, F., Parker A., Ortolano, S., Arslan E., Brown S., Carafoli, E., Mammano, F. The novel PMCA2 pump mutation *Tommy* impairs cytosolic calcium clearance in hair cells and links to deafness in mice. *J Biol. Chem.* (2010), 285, 37693-703 \* **Co-first Author**
62. **Brini, M.**, Carafoli, E. The plasma membrane Ca<sup>2+</sup> ATPase and the plasma membrane sodium calcium exchanger cooperate in the regulation of cell calcium. *Calcium Signalling*. edited by M. Bootman, M. Berridge, J. Putney, L. Roderick, *Cold Spring Harbor Perspectives in Biology*, Cold Spring Harbor Laboratory Press (2011), 3:a004168.
63. Calì, T., Ottolini, D. **Brini, M.** Mitochondria, Calcium and Endoplasmic Reticulum stress in Parkinson's disease. *Biofactors* (2011), 37, 228-240.
64. **Brini, M.** and Carafoli, E. Editorial Calcium signaling and disease: Preface. *Biofactors* (2011), 37, 131.
65. Giorgi, C, Romagnoli A, Agnoletto C, Bergamelli L, Sorrentino G, **Brini M**, Pozzan T, Meldolesi J, Pinton P, Rizzuto R. Translocation of signalling proteins to the plasma membrane revealed by a new bioluminescent procedure. *BMC Cell Biol.* (2011), 12, :27.
66. Zonin, E. Moscatiello, R. Miuzzo, M. Cavallarin, N., Di Paolo, M.L., Sandonà, D., Marin, O., **Brini, M.**, Negro, A., Navazio, L. TAT-mediated Aequorin Transduction: an Alternative Approach for Effective Calcium Measurements in Plant Cells. *Plant Cell Physiol.*(2011), 52, 2225-2235.

67. Giacomello, M., De Mario, A., Lopreiato, R., Primerano, S., Campeol, M., **Brini, M.**, Carafoli, E. Mutations In PMCA2 And Hereditary Deafness: A Molecular Analysis Of The Pump Defect. *Cell Calcium* (2011) 50, 569-576.
68. Cali, T., Ottolini, D., **Brini, M.** Mitochondrial  $\text{Ca}^{2+}$  as a key regulator of mitochondrial activities. *Advances in Mitochondrial Medicine, Adv Exp Med Biol* series edited by R. Scatena, B. Giardina, P. Bottoni Springer Science+Business Media (2012), 942, 53-73.
69. **Brini, M.** Cali, T., Ottolini, D. Carafoli, E.  $\text{Ca}^{2+}$  pumps: why so many? *Comprehensive Physiology* (2012), Volume 2, Issue 2, April 2012, 1045-1060. DOI: 10.1002/cphy.c110034
70. Giacomello M., De Mario A., Primerano S., **Brini M.**, Carafoli E. Hair cells, plasma membrane  $\text{Ca}^{2+}$  ATPase and deafness. *Int J Biochem Cell Biol.* (2012), 44, 679-683.
71. Cali, T., Fedrizzi, L., Ottolini, D., Gomez-Villafuertes, R., Mellström, B., Naranjo, J.R., Carafoli, E., **Brini, M.**  $\text{Ca}^{2+}$ -activated nucleotidase 1, a novel target gene for the transcriptional repressor DREAM (Downstream Regulatory Element Antagonist Modulator), is involved in protein folding and degradation. *J Biol. Chem.* (2012), 287, 18478-18491.
72. Cali, T., Ottolini, D., Negro, A., **Brini, M.** Alpha-synuclein controls mitochondrial calcium homeostasis by enhancing endoplasmic reticulum-mitochondria interactions. *J Biol. Chem.* (2012), 287, 17914-17929.
73. Dierssen, M., Fedrizzi, L., Gomez-Villafuertes, R., Martinez de Lagran, M., Gutierrez-Adan, A., Sahun, I., Pintado, B., Oliveros, J.C., Dopazo, X.M., Paz Gonzalez, **Brini, M.**, Mellstrom, B., Carafoli, E., Naranjo, J.R. Reduced Mid1 expression and delayed neuromotor development in daDREAM transgenic mice. *Frontiers in Molecular Neuroscience* (2012), 5, Article 58, 1-9.
74. Cali, T., Ottolini, D., **Brini, M.** Mitochondrial  $\text{Ca}^{2+}$  and neurodegeneration. *Cell Calcium* (2012), 52, 73-85.
75. Magnone, M., Bauer, I., Poggi, A., Mannino, E., Sturla, L., **Brini, M.**, Zocchi, E., De Flora, A., Nencioni, A., Bruzzone, S.  $\text{NAD}^+$  levels control  $\text{Ca}^{2+}$  stores replenishment and mitogen-induced increase of cytosolic  $\text{Ca}^{2+}$  by ADPR-dependent TRPM2 gating in human T lymphocytes. *J Biol. Chem.* (2012), 287, 21067-21087.
76. Zanni G, Cali T, Kalscheuer VM, Ottolini D, Barresi S, Lebrun N, Montecchi-Palazzi L, Hu H, Chelly J, Bertini E, **Brini M\***, Carafoli E. A Mutation of Plasma Membrane  $\text{Ca}^{2+}$  ATPase Isoform 3 in a Family with X-Linked Congenital Cerebellar Ataxia impairs  $\text{Ca}^{2+}$  Homeostasis. *Proc Natl Acad Sci U S A.* (2012), 109, 14514-14519 \***Co-Corresponding Author**
77. Ottolini, D., Cali, T. **Brini, M.** Measurements of  $\text{Ca}^{2+}$  concentration with recombinant targeted luminescent probes. *Methods Mol Biol* (2012) 937, 273-291. Isnn 1064-3745
78. Cali, T., Ottolini, D., Negro, A., **Brini, M.** Enhanced parkin levels favour ER-mitochondria crosstalk and guarantee  $\text{Ca}^{2+}$  transfer to sustain cell bioenergetics. *Biochim Biophys Acta. Molecular Basis of Disease* (2013), 1832, 495-508.

79. Ottolini, D., Cali, T., Negro A., **Brini, M.** The Parkinson disease-related protein DJ-1 counteracts mitochondrial impairment induced by the tumour suppressor protein p53 by enhancing Endoplasmic Reticulum-mitochondria tethering. *Hum Mol Gen* (2013), 22, 2152-2168.
80. **Brini, M.**, Cali T., Ottolini, D., Carafoli, E. The Plasma Membrane Calcium Pump in Health and Disease. *FEBS J.* (2013) 280:5385-5397.
81. Cali, T., Ottolini, D., **Brini, M.** Calcium and Endoplasmic Reticulum-Mitochondria tethering in neurodegeneration. *DNA and Cell Biology* (2013) 32, 140-146.
82. **Brini, M.**, Cali, T., Ottolini, D., Carafoli, E. Intracellular calcium homeostasis and signaling. *Met Ions Life Sci.* (2013) 12, 119-168. Issn 1559-0836 doi: 10.1007/978-94-007-5561-1\_5.
83. Ottolini, D., Cali, T. **Brini, M.** Etiology and pathogenesis of Parkinson disease-role of mitochondrial pathology. *Research and Reports in Biochemistry* (2013) 3, 55-70.
84. **Brini, M.**, Ottolini, D., Cali, T., Carafoli, E. Calcium in health and disease. *Met Ions Life Sci.* (2013) 13, 81-137. doi: 10.1007/978-94-007-7500-8\_4.
85. **Brini, M.**, Cali, T., Ottolini, D., Carafoli, E. Neuronal Calcium signaling: function and dysfunction. *Cell Mol Life Sci.* (2014) 71, 2787-2814.
86. Cali, T., Ottolini, D., **Brini, M.** Calcium signaling in Parkinson's disease: function and dysfunction *Cell Tissue. Res* (2014) 357, 439-454.
87. Ottolini, D., Cali, T. **Brini, M.** Methods to measure intracellular  $Ca^{2+}$  fluxes with organelle-targeted aequorin based probes. *Meth Enzymol.* (2014) 543, 21-45.
88. Bianchini, E., Testoni, S., Gentile, A., Cali, T., Ottolini, D., Villa, A., **Brini, M.**, Betto, R., Mascarello, F., Nissen, P., Sandonà, D., Sacchetto, R. Inhibition of Ubiquitin Proteasome System Rescues the Defective Sarco(endo)plasmic Reticulum  $Ca^{2+}$ -ATPase (SERCA1) Protein Causing Chianina Cattle Pseudomyotonia. *J Biol Chem.* (2014) 289, 33073-33082.
89. Cali, T., Ottolini, D., Soriano, M.E., **Brini, M.** A new split-GFP-based probe reveals DJ-1 translocation into the mitochondrial matrix to sustain ATP synthesis upon nutrient deprivation. *Hum Mol Genet.* (2015) 24, 1045-1060.
90. Cali, T., Lopreiato, R., Shimony, J., Vineyard, M., Frizzarin, M., Zanni, G., Zanotti, G. **Brini, M\***, Shinawi, M., Carafoli, E.. A novel mutation in isoform 3 of the plasma membrane  $Ca^{2+}$  pump impairs cellular  $Ca^{2+}$  homeostasis in a patient with cerebellar ataxia and laminin subunit 1  $\alpha$  mutations. *J Biol Chem.* (2015) 290:16132-41. May 7. pii: jbc.M115.656496. [Epub ahead of print]
- \*Co-Corresponding Author.**
91. Granatiero V, Giorgio V, Cali T, Patron M, **Brini M**, Bernardi P, Tiranti V, Zeviani M, Pallafacchina G, De Stefani D, Rizzuto R. Reduced mitochondrial  $Ca^{2+}$  transients stimulate autophagy in human fibroblasts carrying the 13514A>G mutation of the ND5 subunit of NADH dehydrogenase. *Cell Death Differ.* (2016) 23(2):231-41. 2015 Jul 24. doi: 10.1038/cdd.2015.84. [Epub ahead of print].

92. De Mario A, Scarlatti C, Costiniti V, Primerano S, Lopreiato R, Cali T, **Brini M**, Giacomello M, Carafoli E. Calcium Handling by Endoplasmic Reticulum and Mitochondria in a Cell Model of Huntington's Disease. *PLoS Curr. Huntington's disease* (2016) Jan 6; 8.pii: ecurrents.hd.37fcb1c9a27503dc845594ee4a7316c3. doi: 0.1371/currents.hd.37fcb1c9a27503dc845594ee4a7316c3. PubMed PMID: 26819834

93. Klionsky DJ, Abdelmohsen K, Abe A, Abedin MJ, Abeliovich H, Acevedo Arozena A, Adachi H, Adams CM, Adams PD, Adeli K, Adihetty PJ, Adler SG, Agam G, Agarwal R, Aghi MK, Agnello M, Agostinis P, Aguilar PV, Aguirre-Ghiso J, Airoidi EM, Ait-Si-Ali S, Akematsu T, Akporiaye ET, Al-Rubeai M, Albaiceta GM, Albanese C, Albani D, Albert ML, Aldudo J, Alglave H, Alirezai M, Alloza I, Almasan A, Almonte-Beceril M, Alnemri ES, Alonso C, Altan-Bonnet N, Altieri DC, Alvarez S, Alvarez-Erviti L, Alves S, Amadoro G, Aman A, Amantini C, Ambrosio S, Amelio I, Amer AO, Amessou M, Amon A, An Z, Anania FA, Andersen SU, Andley UP, Andreadi CK, Andrieu-Abadie N, Anel A, Ann DK, Anoopkumar-Dukie S, Antonioli M, Aoki H, Apostolova N, Aquila S, Aquilano K, Araki K, Arama E, Aranda A, Araya J, Arcaro A, Arias E, Arimoto H, Ariosa AR, Armstrong JL, Arnould T, Arsov I, Asanuma K, Askanas V, Asselin E, Atarashi R, Atherton SS, Atkin JD, Attardi LD, Auburger P, Auburger G, Aurelian L, Autelli R, Avagliano L, Avantiaggiati ML, Avrahami L, Awale S, Azad N, Bachetti T, Backer JM, Bae DH, Bae JS, Bae ON, Bae SH, Baehrecke EH, Baek SH, Baghdiguian S, Bagniewska-Zadworna A, Bai H, Bai J, Bai XY, Bailly Y, Balaji KN, Balduini W, Ballabio A, Balzan R, Banerjee R, Bãñhegyi G, Bao H, Barbeau B, Barrachina MD, Barreiro E, Bartel B, Bartolomã© A, Bassham DC, Bassi MT, Bast RC Jr, Basu A, Batista MT, Batoko H, Battino M, Bauckman K, Baumgarner BL, Bayer KU, Beale R, Beaulieu JF, Beck GR Jr, Becker C, Beckham JD, Bã©dard PA, Bednarski PJ, Begley TJ, Behl C, Behrends C, Behrens GM, Behrns KE, Bejarano E, Belaid A, Belleudi F, Bã©nard G, Berchem G, Bergamaschi D, Bergami M, Berkhout B, Berliocchi L, Bernard A, Bernard M, Bernassola F, Bertolotti A, Bess AS, Besteiro S, Bettuzzi S, Bhalla S, Bhattacharyya S, Bhutia SK, Biagosch C, Bianchi MW, Biard-Piechaczyk M, Billes V, Bincoletto C, Bingol B, Bird SW, Bitoun M, Bjedov I, Blackstone C, Blanc L, Blanco GA, Blomhoff HK, Boada-Romero E, Bã¼ckler S, Boes M, Boesze-Battaglia K, Boise LH, Bolino A, Boman A, Bonaldo P, Bordi M, Bosch J, Botana LM, Botti J, Bou G, Bouchã© M, Bouche-careilh M, Boucher MJ, Boulton ME, Bouret SG, Boya P, Boyer-Guittaut M, Bozhkov PV, Brady N, Braga VM, Brancolini C, Braus GH, Bravo-San Pedro JM, Brennan LA, Bresnick EH, Brest P, Bridges D, Bringer MA, **Brini M**, Brito GC, Brodin B, Brookes PS, Brown EJ, Brown K, Broxmeyer HE, Bruhat A, Brum PC, Brumell JH, Brunetti-Pierri N, Bryson-Richardson RJ, Buch S, Buchan AM, Budak H, Bulavin DV, Bultman SJ, Bultynck G, Bumbasirevic V, Burelle Y, Burke RE, Burmeister M, Bã¼tikofer P, Caberlotto L, Cadwell K, Cahova M, Cai D, Cai J, Cai Q, Calatayud S, Camougrand N, Campanella M, Campbell GR, Campbell M, Campello S, Candau R, Caniggia I, Cantoni L, Cao L, Caplan AB, Caraglia M, Cardinali C, Cardoso SM, Carew JS, Carleton LA, Carlin CR, Carloni S, Carlsson SR, Carmona-Gutierrez D, Carneiro LA, Carnevali O, Carra S, Carrier A, Carroll B, Casas C, Casas J, Cassinelli G, Castets P, Castro-Obregon S, Cavallini G, Ceccherini I, Cecconi F, Cederbaum AI, Ceã±a V, Cenci S, Cerella C, Cervia D, Cetrullo S, Chaachouay H, Chae HJ, Chagin AS, Chai CY, Chakrabarti G, Chamilos G, Chan EY, Chan MT, Chandra D, Chandra P, Chang CP, Chang RC, Chang TY, Chatham JC, Chatterjee S, Chauhan S, Che Y, Cheetham ME, Cheluvappa R, Chen CJ, Chen G, Chen GC, Chen G, Chen H, Chen JW, Chen JK, Chen M, Chen M, Chen P, Chen Q, Chen Q, Chen SD, Chen S, Chen SS, Chen W, Chen WJ, Chen WQ, Chen W, Chen X, Chen YH, Chen YG, Chen Y, Chen Y, Chen Y, Chen YJ, Chen YQ, Chen Y, Chen Z, Chen Z, Cheng A, Cheng CH, Cheng H, Cheong H, Cherry S, Chesney J, Cheung CH, Chevet E, Chi HC, Chi SG, Chiacchiera F, Chiang HL, Chiarelli R, Chiariello M, Chieppa M, Chin LS, Chiong M, Chiu GN, Cho DH, Cho SG, Cho WC, Cho YY, Cho YS, Choi AM, Choi EJ, Choi EK, Choi J, Choi ME, Choi SI, Chou TF, Chouaib S, Choubey D, Choubey V, Chow KC, Chowdhury K, Chu CT, Chuang TH, Chun T, Chung H, Chung T,

Chung YL, Chwae YJ, Cianfanelli V, Ciarcia R, Ciechomska IA, Ciriolo MR, Cirone M, Claerhout S, Clague MJ, Cl ria J, Clarke PG, Clarke R, Clementi E, Cleyrat C, Cnop M, Coccia EM, Cocco T, Codogno P, Coers J, Cohen EE, Colecchia D, Coletto L, Coll NS, Colucci-Guyon E, Comincini S, Condello M, Cook KL, Coombs GH, Cooper CD, Cooper JM, Coppens I, Corasaniti MT, Corazzari M, Corbalan R, Corcelle-Termeau E, Cordero MD, Corral-Ramos C, Corti O, Cossarizza A, Costelli P, Costes S, Cotman SL, Coto-Montes A, Cottet S, Couve E, Covey LR, Cowart LA, Cox JS, Coxon FP, Coyne CB, Cragg MS, Craven RJ, Crepaldi T, Crespo JL, Criollo A, Crippa V, Cruz MT, Cuervo AM, Cuezva JM, Cui T, Cutillas PR, Czaja MJ, Czyzyk-Krzeska MF, Dagda RK, Dahmen U, Dai C, Dai W, Dai Y, Dalby KN, Dalla Valle L, Dalmasso G, D'Amelio M, Damme M, Darfeuille-Michaud A, Dargemont C, Darley-Usmar VM, Dasarathy S, Dasgupta B, Dash S, Dass CR, Davey HM, Davids LM, D vila D, Davis RJ, Dawson TM, Dawson VL, Daza P, de Belleruche J, de Figueiredo P, de Figueiredo RC, de la Fuente J, De Martino L, De Matteis A, De Meyer GR, De Milito A, De Santi M, de Souza W, De Tata V, De Zio D, Debnath J, Dechant R, Decuypere JP, Deegan S, Dehay B, Del Bello B, Del Re DP, Delage-Mourroux R, Delbridge LM, Deldicque L, Delorme-Axford E, Deng Y, Dengjel J, Denizot M, Dent P, Der CJ, Deretic V, Derrien B, Deutsch E, Devarenne TP, Devenish RJ, Di Bartolomeo S, Di Daniele N, Di Domenico F, Di Nardo A, Di Paola S, Di Pietro A, Di Renzo L, DiAntonio A, D az-Araya G, D az-Laviada I, Diaz-Meco MT, Diaz-Nido J, Dickey CA, Dickson RC, Diederich M, Digard P, Dikic I, Dinesh-Kumar SP, Ding C, Ding WX, Ding Z, Dini L, Distler JH, Diwan A, Djavaheri-Mergny M, Dmytruk K, Dobson RC, Doetsch V, Dokladny K, Dokudovskaya S, Donadelli M, Dong XC, Dong X, Dong Z, Donohue TM Jr, Doran KS, D'Orazi G, Dorn GW 2nd, Dosenko V, Dridi S, Drucker L, Du J, Du LL, Du L, du Toit A, Dua P, Duan L, Duann P, Dubey VK, Duchen MR, Duchosal MA, Duez H, Dugail I, Dumit VI, Duncan MC, Dunlop EA, Dunn WA Jr, Dupont N, Dupuis L, Dur n RV, Durcan TM, Duvezin-Caubet S, Duvvuri U, Eapen V, Ebrahimi-Fakhari D, Echard A, Eckhart L, Edelstein CL, Edinger AL, Eichinger L, Eisenberg T, Eisenberg-Lerner A, Eissa NT, El-Deiry WS, El-Khoury V, Elazar Z, Eldar-Finkelman H, Elliott CJ, Emanuele E, Emmenegger U, Engedal N, Engelbrecht AM, Engelender S, Enserink JM, Erdmann R, Erenpreisa J, Eri R, Eriksen JL, Erman A, Escalante R, Eskelinen EL, Espert L, Esteban-Mart nez L, Evans TJ, Fabri M, Fabrias G, Fabrizi C, Facchiano A, F rgeman NJ, Faggioni A, Fairlie WD, Fan C, Fan D, Fan J, Fang S, Fanto M, Fanzani A, Farkas T, Faure M, Favier FB, Fearnhead H, Federici M, Fei E, Felizardo TC, Feng H, Feng Y, Feng Y, Ferguson TA, Fern ndez  F, Fernandez-Barrena MG, Fernandez-Checa JC, Fern ndez-L pez A, Fernandez-Zapico ME, Feron O, Ferraro E, Ferreira-Halder CV, Fesus L, Feuer R, Fiesel FC, Filippi-Chiela EC, Filomeni G, Fimia GM, Fingert JH, Finkbeiner S, Finkel T, Fiorito F, Fisher PB, Flajolet M, Flamigni F, Florey O, Florio S, Floto RA, Folini M, Follo C, Fon EA, Fornai F, Fortunato F, Fraldi A, Franco R, Francois A, Fran ois A, Frankel LB, Fraser ID, Frey N, Freyssenet DG, Frezza C, Friedman SL, Frigo DE, Fu D, Fuentes JM, Fueyo J, Fujitani Y, Fujiwara Y, Fujiya M, Fukuda M, Fulda S, Fusco C, Gabryel B, Gaestel M, Gailly P, Gajewska M, Galadari S, Galili G, Galindo I, Galindo MF, Galliciotti G, Galluzzi L, Galluzzi L, Galy V, Gammoh N, Gandy S, Ganesan AK, Ganesan S, Ganley IG, Gannag  M, Gao FB, Gao F, Gao JX, Garc a Nannig L, Garc a V scovi E, Garcia-Mac a M, Garcia-Ruiz C, Garg AD, Garg PK, Gargini R, Gassen NC, Gatica D, Gatti E, Gavard J, Gavathiotis E, Ge L, Ge P, Ge S, Gean PW, Gelmetti V, Genazzani AA, Geng J, Genschik P, Gerner L, Gestwicki JE, Gewirtz DA, Ghavami S, Ghigo E, Ghosh D, Giammarioli AM, Giampieri F, Giampietri C, Giatromanolaki A, Gibbins DJ, Gibellini L, Gibson SB, Ginet V, Giordano A, Giorgini F, Giovannetti E, Girardin SE, Gispert S, Giuliano S, Gladson CL, Glavic A, Gleave M, Godefroy N, Gogal RM Jr, Gokulan K, Goldman GH, Goletti D, Goligorsky MS, Gomes AV, Gomes LC, Gomez H, Gomez-Manzano C, G mez-S nchez R, Gon salves DA, Goncu E, Gong Q, Gongora C, Gonzalez CB, Gonzalez-Alegre P, Gonzalez-Cabo P, Gonz lez-Polo RA, Goping IS, Gorbea C,

Gorbunov NV, Goring DR, Gorman AM, Gorski SM, Goruppi S, Goto-Yamada S, Gotor C, Gottlieb RA, Gozes I, Gozuacik D, Graba Y, Graef M, Granato GE, Grant GD, Grant S, Gravina GL, Green DR, Greenhough A, Greenwood MT, Grimaldi B, Gros F, Grose C, Groulx JF, Gruber F, Grumati P, Grune T, Guan JL, Guan KL, Guerra B, Guillen C, Gulshan K, Gunst J, Guo C, Guo L, Guo M, Guo W, Guo XG, Gust AA, Gustafsson Å...B, Gutierrez E, Gutierrez MG, Gwak HS, Haas A, Haber JE, Hadano S, Hagedorn M, Hahn DR, Halayko AJ, Hamacher-Brady A, Hamada K, Hamai A, Hamann A, Hamasaki M, Hamer I, Hamid Q, Hammond EM, Han F, Han W, Handa JT, Hanover JA, Hansen M, Harada M, Harhaji-Trajkovic L, Harper JW, Harrath AH, Harris AL, Harris J, Hasler U, Hasselblatt P, Hasui K, Hawley RG, Hawley TS, He C, He CY, He F, He G, He RR, He XH, He YW, He YY, Heath JK, Hebert MJ, Heinzen RA, Helgason GV, Hensel M, Henske EP, Her C, Herman PK, Hernandez A, Hernandez C, Hernandez-Tiedra S, Hetz C, Hiesinger PR, Higaki K, Hilfiker S, Hill BG, Hill JA, Hill WD, Hino K, Hofius D, Hofman P, Hoflinger GU, Hofheld J, Holz MK, Hong Y, Hood DA, Hoozemans JJ, Hoppe T, Hsu C, Hsu CY, Hsu LC, Hu D, Hu G, Hu HM, Hu H, Hu MC, Hu YC, Hu ZW, Hua F, Hua Y, Huang C, Huang HL, Huang KH, Huang KY, Huang S, Huang S, Huang WP, Huang YR, Huang Y, Huang Y, Huber TB, Huebbe P, Huh WK, Hulmi JJ, Hur GM, Hurley JH, Husak Z, Hussain SN, Hussain S, Hwang JJ, Hwang S, Hwang TI, Ichihara A, Imai Y, Imbriano C, Inomata M, Into T, Iovane V, Iovanna JL, Iozzo RV, Ip NY, Irazoqui JE, Iribarren P, Isaka Y, Isakovic AJ, Ischiropoulos H, Isenberg JS, Ishaq M, Ishida H, Ishii I, Ishmael JE, Isidoro C, Isobe KI, Isono E, Issazadeh-Navikas S, Itahana K, Itakura E, Ivanov AI, Iyer AK, Izquierdo JM, Izumi Y, Izzo V, Jaber N, Jackson DJ, Jackson WT, Jacob TG, Jacques TS, Jagannath C, Jain A, Jana NR, Jang BK, Jani A, Janji B, Jannig PR, Jansson PJ, Jean S, Jendrach M, Jeon JH, Jessen N, Jeung EB, Jia K, Jia L, Jiang H, Jiang H, Jiang L, Jiang T, Jiang X, Jiang X, Jiang X, Jiang Y, Jiang Y, Jimenez A, Jin C, Jin H, Jin L, Jin M, Jin S, Jinwal UK, Jo EK, Johansen T, Johnson DE, Johnson GV, Johnson JD, Jonasch E, Jones C, Joosten LA, Jordan J, Joseph AM, Joseph B, Joubert AM, Ju D, Ju J, Juan HF, Juenemann K, Juhász G, Jung HS, Jung JU, Jung YK, Jungbluth H, Justice MJ, Jutten B, Kaakoush NO, Kaarniranta K, Kaasik A, Kabuta T, Kaeffler B, Kagedal K, Kahana A, Kajimura S, Kakhlon O, Kalia M, Kalvakolanu DV, Kamada Y, Kambas K, Kaminsky VO, Kampinga HH, Kandouz M, Kang C, Kang R, Kang TC, Kanki T, Kanneganti TD, Kanno H, Kanthasamy AG, Kantorow M, Kaparakis-Liaskos M, Kapuy O, Karantza V, Karim MR, Karmakar P, Kaser A, Kaushik S, Kawula T, Kaynar AM, Ke PY, Ke ZJ, Kehrl JH, Keller KE, Kemper JK, Kenworthy AK, Kepp O, Kern A, Kesari S, Kessel D, Ketteler R, Kettelhut ID, Khambu B, Khan MM, Khandelwal VK, Khare S, Kiang JG, Kiger AA, Kihara A, Kim AL, Kim CH, Kim DR, Kim DH, Kim EK, Kim HY, Kim HR, Kim JS, Kim JH, Kim JC, Kim JH, Kim KW, Kim MD, Kim MM, Kim PK, Kim SW, Kim SY, Kim YS, Kim Y, Kimchi A, Kimmelman AC, Kimura T, King JS, Kirkegaard K, Kirkin V, Kirshenbaum LA, Kishi S, Kitajima Y, Kitamoto K, Kitaoka Y, Kitazato K, Kley RA, Klimecki WT, Klinkenberg M, Klucken J, Knävelsrud H, Knecht E, Knuppertz L, Ko JL, Kobayashi S, Koch JC, Koechlin-Ramonatxo C, Koenig U, Koh YH, Köhler K, Kohlwein SD, Koike M, Komatsu M, Kominami E, Kong D, Kong HJ, Konstantakou EG, Kopp BT, Korcsmaros T, Korhonen L, Korolchuk VI, Koshkina NV, Kou Y, Koukourakis MI, Koumenis C, Kovács AL, Kovács T, Kovacs WJ, Koya D, Kraft C, Krainc D, Kramer H, Kravic-Stevovic T, Krek W, Kretz-Remy C, Krick R, Krishnamurthy M, Kriston-Vizi J, Kroemer G, Kruer MC, Kruger R, Ktistakis NT, Kuchitsu K, Kuhn C, Kumar AP, Kumar A, Kumar A, Kumar D, Kumar D, Kumar R, Kumar S, Kundu M, Kung HJ, Kuno A, Kuo SH, Kuret J, Kurz T, Kwok T, Kwon TK, Kwon YT, Kyrmizi I, La Spada AR, Lafont F, Lahm T, Lakkaraju A, Lam T, Lamark T, Lancel S, Landowski TH, Lane

DJ, Lane JD, Lanzi C, Lapaquette P, Lapierre LR, Laporte J, Laukkarinen J, Laurie GW, Lavandero S, Lavie L, LaVoie MJ, Law BY, Law HK, Law KB, Layfield R, Lazo PA, Le Cam L, Le Roch KG, Le Stunff H, Leardkamolkarn V, Lecuit M, Lee BH, Lee CH, Lee EF, Lee GM, Lee HJ, Lee H, Lee JK, Lee J, Lee JH, Lee JH, Lee M, Lee MS, Lee PJ, Lee SW, Lee SJ, Lee SJ, Lee SY, Lee SH, Lee SS, Lee SJ, Lee S, Lee YR, Lee YJ, Lee YH, Leeuwenburgh C, Lefort S, Legouis R, Lei J, Lei QY, Leib DA, Leibowitz G, Lekli I, Lemaire SD, Lemasters JJ, Lemberg MK, Lemoine A, Leng S, Lenz G, Lenzi P, Lerman LO, Lettieri Barbato D, Leu JI, Leung HY, Levine B, Lewis PA, Lezoualc'h F, Li C, Li F, Li FJ, Li J, Li K, Li L, Li M, Li M, Li Q, Li R, Li S, Li W, Li W, Li X, Li Y, Lian J, Liang C, Liang Q, Liao Y, Liberal J, Liberski PP, Lie P, Lieberman AP, Lim HJ, Lim KL, Lim K, Lima RT, Lin CS, Lin CF, Lin F, Lin F, Lin FC, Lin K, Lin KH, Lin PH, Lin T, Lin WW, Lin YS, Lin Y, Linden R, Lindholm D, Lindqvist LM, Lingor P, Linkermann A, Liotta LA, Lipinski MM, Lira VA, Lisanti MP, Liton PB, Liu B, Liu C, Liu CF, Liu F, Liu HJ, Liu J, Liu JJ, Liu JL, Liu K, Liu L, Liu L, Liu Q, Liu RY, Liu S, Liu S, Liu W, Liu XD, Liu X, Liu XH, Liu X, Liu X, Liu X, Liu Y, Liu Y, Liu Z, Liu Z, Liuzzi JP, Lizard G, Ljujic M, Lodhi IJ, Logue SE, Lokeshwar BL, Long YC, Lonial S, Loos B, LÃ³pez-OtÃ±n C, LÃ³pez-Vicario C, Lorente M, Lorenzi PL, LÃ¼rincz P, Los M, Lotze MT, Lovat PE, Lu B, Lu B, Lu J, Lu Q, Lu SM, Lu S, Lu Y, Luciano F, Luckhart S, Lucocq JM, Ludovico P, Lugea A, Lukacs NW, Lum JJ, Lund AH, Luo H, Luo J, Luo S, Luparello C, Lyons T, Ma J, Ma Y, Ma Y, Ma Z, Machado J, Machado-Santelli GM, Macian F, MacIntosh GC, MacKeigan JP, Macleod KF, MacMicking JD, MacMillan-Crow LA, Madeo F, Madesh M, Madrigal-Matute J, Maeda A, Maeda T, Maegawa G, Maellaro E, Maes H, MagariÃ±os M, Maiese K, Maiti TK, Maiuri L, Maiuri MC, Maki CG, Malli R, Malorni W, Maloyan A, Mami-Chouaib F, Man N, Mancias JD, Mandelkow EM, Mandell MA, Manfredi AA, ManiÃ© SN, Manzoni C, Mao K, Mao Z, Mao ZW, Marambaud P, Marconi AM, Marelja Z, Marfe G, Margeta M, Margittai E, Mari M, Mariani FV, Marin C, Marinelli S, MariÃ±o G, Markovic I, Marquez R, Martelli AM, Martens S, Martin KR, Martin SJ, Martin S, Martin-Acebes MA, MartÃ±n-Sanz P, Martinand-Mari C, Martinet W, Martinez J, Martinez-Lopez N, Martinez-Outschoorn U, MartÃ±ez-VelÃ¡zquez M, Martinez-Vicente M, Martins WK, Mashima H, Mastrianni JA, Matarese G, Matarrese P, Mateo R, Matoba S, Matsumoto N, Matsushita T, Matsuura A, Matsuzawa T, Mattson MP, Matus S, Maugeri N, Mauvezin C, Mayer A, Maysinger D, Mazzolini GD, McBrayer MK, McCall K, McCormick C, McInerney GM, McIver SC, McKenna S, McMahan JJ, McNeish IA, Mechta-Grigoriou F, Medema JP, Medina DL, Megyeri K, Mehrpour M, Mehta JL, Mei Y, Meier UC, Meijer AJ, MelÃ©ndez A, Melino G, Melino S, de Melo EJ, Mena MA, Meneghini MD, Menendez JA, Menezes R, Meng L, Meng LH, Meng S, Menghini R, Menko AS, Menna-Barreto RF, Menon MB, Meraz-RÃ³s MA, Merla G, Merlini L, Merlot AM, Meryk A, Meschini S, Meyer JN, Mi MT, Miao CY, Micale L, Michaeli S, Michiels C, Migliaccio AR, Mihailidou AS, Mijaljica D, Mikoshiba K, Milan E, Miller-Fleming L, Mills GB, Mills IG, Minakaki G, Minassian BA, Ming XF, Minibayeva F, Minina EA, Mintern JD, Minucci S, Miranda-Vizuete A, Mitchell CH, Miyamoto S, Miyazawa K, Mizushima N, Mnich K, Mograbi B, Mohseni S, Moita LF, Molinari M, Molinari M, MÃ¶ller AB, Mollereau B, Mollinedo F, Mongillo M, Monick MM, Montagnaro S, Montell C, Moore DJ, Moore MN, Mora-Rodriguez R, Moreira PI, Morel E, Morelli MB, Moreno S, Morgan MJ, Moris A, Moriyasu Y, Morrison JL, Morrison LA, Morselli E, Moscat J, Moseley PL, Mostowy S, Motori E, Mottet D, Mottram JC, Moussa CE, Mpakou VE, Mukhtar H, Mulcahy Levy JM, Muller S, MuÃ±oz-Moreno R, MuÃ±oz-Pinedo C, MÃ¼nz C, Murphy ME, Murray JT, Murthy A, Mysorekar IU, Nabi IR, Nabissi M, Nader GA, Nagahara Y, Nagai Y, Nagata K, Nagelkerke A,

Nagy P, Naidu SR, Nair S, Nakano H, Nakatogawa H, Nanjundan M, Napolitano G, Naqvi NI, Nardacci R, Narendra DP, Narita M, Nascimbeni AC, Natarajan R, Navegantes LC, Nawrocki ST, Nazarko TY, Nazarko VY, Neill T, Neri LM, Netea MG, Netea-Maier RT, Neves BM, Ney PA, Nezis IP, Nguyen HT, Nguyen HP, Nicot AS, Nilsen H, Nilsson P, Nishimura M, Nishino I, Niso-Santano M, Niu H, Nixon RA, Njar VC, Noda T, Noegel AA, Nolte EM, Norberg E, Norga KK, Noureini SK, Notomi S, Notterpek L, Nowikovsky K, Nukina N, Nyrnberger T, O'Donnell VB, O'Donovan T, O'Dwyer PJ, Oehme I, Oeste CL, Ogawa M, Ogretmen B, Ogura Y, Oh YJ, Ohmuraya M, Ohshima T, Ojha R, Okamoto K, Okazaki T, Oliver FJ, Ollinger K, Olsson S, Orban DP, Ordonez P, Orhon I, Orosz L, O'Rourke EJ, Orozco H, Ortega AL, Ortona E, Osellame LD, Oshima J, Oshima S, Osiewacz HD, Otomo T, Otsu K, Ou JJ, Outeiro TF, Ouyang DY, Ouyang H, Overholtzer M, Ozbun MA, Ozdinler PH, Ozpolat B, Pacelli C, Paganetti P, Page G, Pages G, Pagnini U, Pajak B, Pak SC, Pakos-Zebrucka K, Pakpour N, Palkovı Z, Palladino F, Pallauf K, Pallet N, Palmieri M, Paludan SR, Palumbo C, Palumbo S, Pampliega O, Pan H, Pan W, Panaretakis T, Pandey A, Pantazopoulou A, Papackova Z, Papademetrio DL, Papassideri I, Papini A, Parajuli N, Pardo J, Parekh VV, Parenti G, Park JI, Park J, Park OK, Parker R, Parlato R, Parys JB, Parzych KR, Pasquet JM, Pasquier B, Pasumarthi KB, Patschan D, Patterson C, Patingre S, Pattison S, Pause A, Pavenstıdt H, Pavone F, Pedrozo Z, Peıa FJ, Peıalva MA, Pende M, Peng J, Penna F, Penninger JM, Pensalfini A, Pepe S, Pereira GJ, Pereira PC, Pırez-de la Cruz V, Pırez-Pırez ME, Pırez-Rodrıguez D, Pırez-Sala D, Perier C, Perl A, Perlmutter DH, Perrotta I, Pervaiz S, Pesonen M, Pessin JE, Peters GJ, Petersen M, Petrache I, Petrof BJ, Petrovski G, Phang JM, Piacentini M, Pierdominici M, Pierre P, Pierrefite-Carle V, Pietrocola F, Pimentel-Muiıos FX, Pinar M, Pineda B, Pinkas-Kramarski R, Pinti M, Pinton P, Piperdi B, Piret JM, Plataniias LC, Platta HW, Plowey ED, Pıggeler S, Poirot M, Polıic P, Poletti A, Poon AH, Popelka H, Popova B, Poprawa I, Poulouse SM, Poulton J, Powers SK, Powers T, Pozuelo-Rubio M, Prak K, Prange R, Prescott M, Priault M, Prince S, Proia RL, Proikas-Cezanne T, Prokisch H, Promponas VJ, Przyklenk K, Puertollano R, Pugazhenth S, Puglielli L, Pujol A, Puyal J, Pyeon D, Qi X, Qian WB, Qin ZH, Qiu Y, Qu Z, Quadrilatero J, Quinn F, Raben N, Rabinowich H, Radogna F, Ragusa MJ, Rahmani M, Raina K, Ramanadham S, Ramesh R, Rami A, Randall-Demllo S, Randow F, Rao H, Rao VA, Rasmussen BB, Rasse TM, Ratovitski EA, Rautou PE, Ray SK, Razani B, Reed BH, Reggiori F, Rehm M, Reichert AS, Rein T, Reiner DJ, Reits E, Ren J, Ren X, Renna M, Reusch JE, Revuelta JL, Reyes L, Rezaie AR, Richards RI, Richardson DR, Richetta C, Riehle MA, Rihn BH, Rikihisa Y, Riley BE, Rimbach G, Rippo MR, Ritis K, Rizzi F, Rizzo E, Roach PJ, Robbins J, Roberge M, Roca G, Roccheri MC, Rocha S, Rodrigues CM, Rodrıguez CI, de Cordoba SR, Rodriguez-Muela N, Roelofs J, Rogov VV, Rohn TT, Rohrer B, Romanelli D, Romani L, Romano PS, Roncero MI, Rosa JL, Rosello A, Rosen KV, Rosenstiel P, Rost-Roszkowska M, Roth KA, Rouı G, Rouis M, Rouschop KM, Ruan DT, Ruano D, Rubinsztein DC, Rucker EB 3rd, Rudich A, Rudolf E, Rudolf R, Ruegg MA, Ruiz-Roldan C, Ruparelia AA, Rusmini P, Russ DW, Russo GL, Russo G, Russo R, Rusten TE, Ryabovol V, Ryan KM, Ryter SW, Sabatini DM, Sacher M, Sachse C, Sack MN, Sadoshima J, Saftig P, Sagi-Eisenberg R, Sahni S, Saikumar P, Saito T, Saitoh T, Sakakura K, Sakoh-Nakatogawa M, Sakuraba Y, Salazar-Roa M, Salomoni P, Saluja AK, Salvaterra PM, Salvioli R, Samali A, Sanchez AM, Sınchez-Alcızar JA, Sanchez-Prieto R, Sandri M, Sanjuan MA, Santaguida S, Santambrogio L, Santoni G, Dos Santos CN, Saran S, Sardiello M, Sargent G, Sarkar P, Sarkar S, Sarrias MR, Sarwal MM, Sasakawa C, Sasaki M, Sass M, Sato K, Sato M, Satriano J, Savaraj N, Saveljeva S, Schaefer L, Schaible UE, Scharl M, Schatzl HM, Schekman R, Scheper W, Schiavi A, Schipper HM, Schmeisser H, Schmidt J, Schmitz I, Schneider BE, Schneider EM, Schneider JL, Schon EA, Schınenberger MJ, Schınthal AH, Schorderet DF, Schrıder B, Schuck S, Schulze RJ,



Schwarten M, Schwarz TL, Sciarretta S, Scotto K, Scovassi AI, Scream RA, Screen M, Seca H, Sedej S, Segatori L, Segev N, Seglen PO, Seguã-Simarro JM, Segura-Aguilar J, Seki E, Sell C, Selliez I, Semenkovich CF, Semenza GL, Sen U, Serra AL, Serrano-Puebla A, Sesaki H, Setoguchi T, Settembre C, Shacka JJ, Shajahan-Haq AN, Shapiro IM, Sharma S, She H, Shen CJ, Shen CC, Shen HM, Shen S, Shen W, Sheng R, Sheng X, Sheng ZH, Shepherd TG, Shi J, Shi Q, Shi Q, Shi Y, Shibutani S, Shibuya K, Shidoji Y, Shieh JJ, Shih CM, Shimada Y, Shimizu S, Shin DW, Shinohara ML, Shintani M, Shintani T, Shioi T, Shirabe K, Shiri-Sverdlov R, Shirihai O, Shore GC, Shu CW, Shukla D, Sibirny AA, Sica V, Sigurdson CJ, Sigurdsson EM, Sijwali PS, Sikorska B, Silveira WA, Silvente-Poirot S, Silverman GA, Simak J, Simmet T, Simon AK, Simon HU, Simone C, Simons M, Simonsen A, Singh R, Singh SV, Singh SK, Sinha D, Sinha S, Sinicrope FA, Sirko A, Sirohi K, Sishi BJ, Sittler A, Siu PM, Sivridis E, Skwarska A, Slack R, Slaninová I, Slavov N, Smaili SS, Smalley KS, Smith DR, Soenen SJ, Soleimanpour SA, Solhaug A, Somasundaram K, Son JH, Sonawane A, Song C, Song F, Song HK, Song JX, Song W, Soo KY, Sood AK, Soong TW, Soontornniyomkij V, Sorice M, Sotgia F, Soto-Pantoja DR, Sotthibundhu A, Sousa MJ, Spaink HP, Span PN, Spang A, Sparks JD, Speck PG, Spector SA, Spies CD, Springer W, Clair DS, Stacchiotti A, Staels B, Stang MT, Starczynowski DT, Starokadomskyy P, Steegborn C, Steele JW, Stefanis L, Steffan J, Stellrecht CM, Stenmark H, Stepkowski TM, Stern ST, Stevens C, Stockwell BR, Stoka V, Storchova Z, Stork B, Stratoulis V, Stravopodis DJ, Strnad P, Strohecker AM, Ström AL, Stromhaug P, Stulik J, Su YX, Sü Z, Subauste CS, Subramaniam S, Sue CM, Suh SW, Sui X, Sukseree S, Sulzer D, Sun FL, Sun J, Sun J, Sun SY, Sun Y, Sun Y, Sun Y, Sundaramoorthy V, Sung J, Suzuki H, Suzuki K, Suzuki N, Suzuki T, Suzuki YJ, Swanson MS, Swanton C, Swärd K, Swarup G, Sweeney ST, Sylvester PW, Szatmari Z, Szegezdi E, Szlosarek PW, Taegtmeier H, Tafani M, Taillebourg E, Tait SW, Takacs-Vellai K, Takahashi Y, Takãts S, Takemura G, Takigawa N, Talbot NJ, Tamagno E, Tamburini J, Tan CP, Tan L, Tan ML, Tan M, Tan YJ, Tanaka K, Tanaka M, Tang D, Tang D, Tang G, Tanida I, Tanji K, Tannous BA, Tapia JA, Tasset-Cuevas I, Tatar M, Tavassoly I, Tavernarakis N, Taylor A, Taylor GS, Taylor GA, Taylor JP, Taylor MJ, Tchétina EV, Tee AR, Teixeira-Clerc F, Telang S, Tencomnao T, Teng BB, Teng RJ, Terro F, Tettamanti G, Theiss AL, Theron AE, Thomas KJ, Thomã MP, Thomes PG, Thorburn A, Thorner J, Thum T, Thumm M, Thurston TL, Tian L, Till A, Ting JP, Titorenko VI, Toker L, Toldo S, Tooze SA, Topisirovic I, Torgersen ML, Torosantucci L, Torriglia A, Torrisi MR, Tournier C, Towns R, Trajkovic V, Travassos LH, Triola G, Tripathi DN, Trisciuglio D, Troncoso R, Trougakos IP, Truttmann AC, Tsai KJ, Tschan MP, Tseng YH, Tsukuba T, Tsung A, Tsvetkov AS, Tu S, Tuan HY, Tucci M, Tumbarello DA, Turk B, Turk V, Turner RF, Tveita AA, Tyagi SC, Ubukata M, Uchiyama Y, Udelnow A, Ueno T, Umekawa M, Umemiya-Shirafuji R, Underwood BR, Unger mann C, Ureshino RP, Ushioda R, Uversky VN, Uzcãtegui NL, Vaccari T, Vaccaro MI, Vãchovã L, Vakifahmetoglu-Norberg H, Valdor R, Valente EM, Vallette F, Valverde AM, Van den Berghe G, Van Den Bosch L, van den Brink GR, van der Goot FG, van der Klei IJ, van der Laan LJ, van Doorn WG, van Egmond M, van Golen KL, Van Kaer L, van Lookeren Campagne M, Vandenabeele P, Vandenberghe W, Vanhorebeek I, Varela-Nieto I, Vasconcelos MH, Vasko R, Vavvas DG, Vega-Naredo I, Velasco G, Velentzas AD, Velentzas PD, Vellai T, Vellenga E, Vendelbo MH, Venkatachalam K, Ventura N, Ventura S, Veras PS, Verdier M, Vertessy BG, Viale A, Vidal M, Vieira H, Vierstra RD, Vigneswaran N, Vij N, Vila M, Villar M, Villar VH, Villarroya J, Vindis C, Viola G, Viscomi MT, Vitale G, Vogl DT, Voitsekhovskaja OV, von Haefen C, von Schwarzenberg K, Voth DE, Vouret-Craviari V, Vuori K, Vyas JM, Waeber C, Walker CL, Walker MJ, Walter J, Wan L, Wan X, Wang B, Wang C, Wang CY, Wang C, Wang C,

Wang C, Wang D, Wang F, Wang F, Wang G, Wang HJ, Wang H, Wang HG, Wang H, Wang HD, Wang J, Wang J, Wang M, Wang MQ, Wang PY, Wang P, Wang RC, Wang S, Wang TF, Wang X, Wang XJ, Wang XW, Wang X, Wang X, Wang Y, Wang Y, Wang Y, Wang YJ, Wang Y, Wang Y, Wang YT, Wang Y, Wang ZN, Wappner P, Ward C, Ward DM, Warnes G, Watada H, Watanabe Y, Watase K, Weaver TE, Weekes CD, Wei J, Weide T, Weihl CC, Weindl G, Weis SN, Wen L, Wen X, Wen Y, Westermann B, Weyand CM, White AR, White E, Whitton JL, Whitworth AJ, Wiels J, Wild F, Wildenberg ME, Wileman T, Wilkinson DS, Wilkinson S, Willbold D, Williams C, Williams K, Williamson PR, Winklhofer KF, Witkin SS, Wohlgemuth SE, Wollert T, Wolvetang EJ, Wong E, Wong GW, Wong RW, Wong VK, Woodcock EA, Wright KL, Wu C, Wu D, Wu GS, Wu J, Wu J, Wu M, Wu M, Wu S, Wu WK, Wu Y, Wu Z, Xavier CP, Xavier RJ, Xia GX, Xia T, Xia W, Xia Y, Xiao H, Xiao J, Xiao S, Xiao W, Xie CM, Xie Z, Xie Z, Xilouri M, Xiong Y, Xu C, Xu C, Xu F, Xu H, Xu H, Xu J, Xu J, Xu J, Xu L, Xu X, Xu Y, Xu Y, Xu ZX, Xu Z, Xue Y, Yamada T, Yamamoto A, Yamanaka K, Yamashina S, Yamashiro S, Yan B, Yan B, Yan X, Yan Z, Yanagi Y, Yang DS, Yang JM, Yang L, Yang M, Yang PM, Yang P, Yang Q, Yang W, Yang WY, Yang X, Yang Y, Yang Y, Yang Z, Yang Z, Yao MC, Yao PJ, Yao X, Yao Z, Yao Z, Yasui LS, Ye M, Yedvobnick B, Yeganeh B, Yeh ES, Yeyati PL, Yi F, Yi L, Yin XM, Yip CK, Yoo YM, Yoo YH, Yoon SY, Yoshida KI, Yoshimori T, Young KH, Yu H, Yu JJ, Yu JT, Yu J, Yu L, Yu WH, Yu XF, Yu Z, Yuan J, Yuan ZM, Yue BY, Yue J, Yue Z, Zacks DN, Zacksenhaus E, Zaffaroni N, Zaglia T, Zakeri Z, Zecchini V, Zeng J, Zeng M, Zeng Q, Zervos AS, Zhang DD, Zhang F, Zhang G, Zhang GC, Zhang H, Zhang H, Zhang H, Zhang H, Zhang J, Zhang J, Zhang J, Zhang J, Zhang JP, Zhang L, Zhang L, Zhang L, Zhang L, Zhang MY, Zhang X, Zhang XD, Zhang Y, Zhang Y, Zhang Y, Zhang Y, Zhang Y, Zhao M, Zhao WL, Zhao X, Zhao YG, Zhao Y, Zhao Y, Zhao YX, Zhao Z, Zhao ZJ, Zheng D, Zheng XL, Zheng X, Zhivotovsky B, Zhong Q, Zhou GZ, Zhou G, Zhou H, Zhou SF, Zhou XJ, Zhu H, Zhu H, Zhu WG, Zhu W, Zhu XF, Zhu Y, Zhuang SM, Zhuang X, Ziparo E, Zois CE, Zoladek T, Zong WX, Zorzano A, Zughai SM.

Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*. 2016 Jan 2;**12**(1):1-222. PubMed PMID: 26799652.

94. Figueroa, KP, Sharan, P. Cali, T. Lopreiato, R., Karan, S., Frizzarin, M., Ames, D., Zanni, G., **Brini, M.**, Dasithong, W., Milash, B., Scoles, DR, Carafoli, E. and Pulst, S. Spontaneous Shaker Rat Mutant - A New Model for X-Linked Tremor-Ataxia. *Disease Models and Mechanisms* (2016) 9, 553-562.

95. Cieri D, **Brini M**, Cali T. Emerging (and converging) pathways in Parkinson's disease: keeping mitochondrial wellness. *Biochem Biophys Res Commun*. (2017) 483:1020-1030.

96. **Brini M**, Carafoli E, Cali T. The plasma membrane calcium pumps: focus on the role in (neuro)pathology. *Biochem Biophys Res Commun*. (2017) 483:1116-1124.

97. Ottolini D, Cali T, Szabò I, **Brini M**. Alpha-synuclein at the intracellular and the extracellular side: functional and dysfunctional implications. *Biol Chem*. (2017) 398:77-100. doi: 10.1515/hsz-2016-0201.

98. Cali T, Frizzarin M, Luoni L, Zonta F, Pantano S, Cruz C, Bonza MC, Bertipaglia I, Ruzzene M, De Michelis MI, Damiano N, Marin O, Zanni G, Zanotti G, **Brini M**, Lopreiato R, Carafoli E. The ataxia related G1107D mutation of the plasma membrane Ca(2+) ATPase isoform 3 affects its interplay with calmodulin and the autoinhibition process. *Biochim Biophys Acta. Mol. Bas Dis* (2017) 1863:165-173.

99. Cali, T., **Brini, M.** Carafoli, E: The Regulation Of Cell Calcium And The Role Of The Plasma Membrane Calcium ATPases. *Int Rev Cell Mol Biology*. (2017) 332:259-296.
100. **Brini, M.**, Leanza, L., Szabò, I. Lipid-mediated modulation of intracellular channels and redox state: pathophysiological implications. *Antioxid Redox Signal*. (2017) Sep 21. doi: 10.1089/ars.2017.7215. [Epub ahead of print]
101. Vicario, M.; Cali, T.; Cieri, D.; Vallese, F.; Bortolotto, R.; Lopreiato, R.; Zonta, F.; Nardella, M.; Micalizzi, A.; Lefebvre, D.J.; Valente, E.M.; Bertini, E.; Zanotti, G.; Zanni, G.; **Brini, M.\***; Carafoli, E. **\*co-corresponding author** A novel PMCA3 mutation in an ataxic patient with hypomorphic phosphomannomutase 2 (PMM2) heterozygote mutations: Biochemical characterization of the pump defect. *Biochim Biophys Acta. Mol. Bas Dis* (2017) 1863:3303-3312
102. Cieri, D., Vicario, M., Giacomello, M., Vallese, F., Filadi, R., Wagner, T., Pozzan, T., Pizzo, P., Scorrano, L., **Brini, M.\*** Cali, T. SPLICS: a split green fluorescent protein-based contact site sensor for narrow and wide heterotypic organelle juxtaposition. *Cell Death Differ*. (2018) 25(6):1131-1145.. **\*co-corresponding author**.
103. Cali T, **Brini M**, Carafoli E. The PMCA Pumps in genetically determined neuronal pathologies. *Neurosci Lett*. (2018) 663:2-11.
104. Carafoli E, **Brini M**, Cali T. Editorial. *Neurosci Lett*. (2018); 663:1.
105. Betzer C, Lassen LB, Olsen A, Kofoed RH, Reimer L, Gregersen E, Zheng J, Cali T, Gai WP, Chen T, Moeller A, **Brini M**, Fu Y, Halliday G, Brudek T, Aznar S, Pakkenberg B, Andersen JP, Jensen PH. Alpha-synuclein aggregates activate calcium pump SERCA leading to calcium dysregulation. *EMBO Rep*. (2018) Mar 29. pii: e44617. doi: 10.15252/embr.201744617. [Epub ahead of print]
106. Vicario, M., Zanni G., Vallese, F., Santorelli, F., Grinzato, A., Cieri, D., Berto, P., Frizzarin, M., Lopreiato, R., Zonta, F., Ferro, S., Sandre, R., Marin, O., Ruzzene, M., Bertini, E., Zanotti, G., **Brini, M.\***, Cali, T., Carafoli, E. A V1143F mutation in the neuronal-enriched isoform 2 of the PMCA pump is linked with ataxia. *Neurobiol Dis* (2018) 115:157-166. **\*co-corresponding author**.
107. Vicario, M., Cieri, D., **Brini, M.**, Cali, T. The close encounter between alpha-synuclein and mitochondria. *Front Neurosci*. (2018) Jun 7;12:388. doi: 10.3389/fnins.2018.00388. eCollection 2018.
108. Cieri D, Vicario M, Vallese F, D'Orsi B, Berto P, Grinzato A, Catoni C, De Stefani D, Rizzuto R, **Brini M**, Cali T. Tau localizes within mitochondrial sub-compartments and its caspase cleavage affects ER-mitochondria interactions and cellular Ca<sup>2+</sup> handling. *Biochim Biophys Acta Mol Basis Dis*. (2018) 1864(10):3247-3256.
109. Basso V, Marchesan E, Peggion C, Chakraborty J, von Stockum S, Giacomello M, Ottolini D, Debattisti V, Caicci F, Tasca E, Pegoraro V, Angelini C, Antonini A,

Bertoli A, **Brini M**, Ziviani E. Regulation of ER-mitochondria contacts by Parkin via Mfn2. *Pharmacol Res.* (2018) 138:43-56.

110. Matteucci, A., Patron, M., Denis Vecellio Reane, D. Gastaldello, S., Salvatore Amoroso, S., Rizzuto, R., **Brini, M.**, Raffaello, A., Cali, T. Parkin-dependent regulation of the MCU complex component MICU1 *Sci Rep.* (2018) 8(1):14199. doi: 10.1038/s41598-018-32551-7.

111. Catoni C, Cali T, **Brini M.** Calcium, Dopamine and Neuronal Calcium Sensor 1: Their Contribution to Parkinson's Disease. *Front Mol Neurosci.* 2019 Mar 22;12:55. doi: 10.3389/fnmol.2019.00055. eCollection 2019.

112. Vicario, M., Cieri, D., Vallese, F., Catoni, C., Berto, P., Grinzato, A., Barazzuol, L., Barbieri, L., **Brini, M.\*** and Cali, T.\* A split-GFP tool reveals differences in the sub-mitochondrial distribution of wt and mutant alpha-synuclein", *Cell Death and Disease*, 2019 submitted \*co-corresponding author.

### B- Lavori su riviste nazionali

113. Bastianutto, C., **Brini, M.**, Pasti, L., Pozzan, T. & Rizzuto, R. : Il direzionamento specifico della fotoproteina equorina: un nuovo approccio alla misura del Ca<sup>2+</sup> cellulare. *Giornale Italiano di Chimica Clinica* (1993), Vol.18 - n.3.

### C- Capitoli di libri

114. **Brini, M.**, Bastianutto, C. & Rizzuto, R.: L' equorina ricombinante: un nuovo approccio alla misura del Ca<sup>2+</sup> intracellulare. *La Chemiluminescenza. Sviluppo tecnologico ed attuali applicazioni in laboratorio*, edizioni Sorbona Milano (1996), 174-187.

115. **Brini, M.**, Pinton, P. & Bastianutto, C. : Targeting, expressing and calibrating recombinant aequorin. *Imaging Living Cells*. Edited by Rizzuto R. & Fasolato C. ; Springer Lab Manual (1998), Section 11, 263-283.

116. **Brini, M.**, Pinton, P., Magalhães, P., Filippin, L., Pozzan, T. & Rizzuto, R.: Measuring Ca<sup>2+</sup> in the nucleoplasm of intact cells. *Measuring Calcium and calmodulin Inside and Outside Cells*. Edited by Petersen O.H., Springer Lab Manual (2000), Chapter 5, 105-130.

117. Pinton, P., Drummond, R., Magalhães, P., **Brini, M.**, Chiesa, A., Pozzan, T. & Rizzuto, R.: Ca<sup>2+</sup> measurements in mitochondria. *Measuring Calcium and calmodulin Inside and Outside Cells*. Edited by Petersen O.H., Springer Lab Manual (2000), Chapter 9, 185-210.

118. Magalhães, P., **Brini, M.**, Pinton, P., Filippin, L., Chiesa, A., Pozzan, T. & Rizzuto, R. : Targeting of bioluminescent probes and calcium measurements in different subcellular compartments. *Calcium Signalling: A Practical Approach*. Edited by A. V. Tepikin (2000), Chapter 4, 59-75.

119. Branca, D., **Brini, M.** & Carafoli, E.: Calcium pumps. ATP-dependent Ca<sup>2+</sup> transporting systems. *The Encyclopedia of Molecular Medicine*. Edited by T. E. Creighton, John Wiley & Sons, Inc. (2002), 5, 420-424.

120. Carafoli, E., Coletto, L. & **Brini, M.**: Plasma membrane calcium pumps. *Handbook of ATPases*. Edited by M. Futai, Y. Wada, J.H. Kaplan, Wiley-VCH Verlag GmbH, Weinheim. (2004) , chapter 8, 211-233.

121. **Brini, M.**, & Rizzuto, R.: Calcium Transport in Mitochondria. *Encyclopedia of Biological Chemistry*. Edited by W. Lennarz, D.M. Lane, Elsevier (2004), 1, 261-266.
122. **Brini, M.**: Calcium oscillations. *Encyclopedia of Biological Chemistry*. Edited by W. Lennarz, D.M. Lane, Elsevier (2004), 1, 231-234.
123. **Brini, M.**, Carafoli, E.: Prologue. *Calcium signalling and disease. Subcellular Biochemistry*. Edited by E. Carafoli, M. Brini, Springer (2007), vol.45.
124. **Brini, M.**, Fedrizzi, L., Carafoli, E. : Calcium signalling: encoding and decoding. *Wiley Encyclopedia of Chemical Biology*. Edited by N.Civjan, Wiley & Sons, Inc. (2008), doi: 10.1002/9780470048672.weeb.048, 1-10
125. Carafoli, E., Fedrizzi, L., Domi, T., Di Leva, F., **Brini, M.**: Calcium pumps. *Handbook of Cell Signaling*. 2<sup>nd</sup> edition Edited by R. A. Bradshaw, E. A.Dennis, Oxford:Academic Press (2009), chapter 118, 943-948 .
126. Fedrizzi, L., **Brini, M.**: Bioluminescent Ca<sup>2+</sup> indicators. *Calcium Measurements Methods* . Neuromethods series, edited by A. Verkhratsky and O:H: Petersen, Humana press, Springer Science+Business Media, LLC. (2009),vol.43, chapter 4, 81-100.
127. **Brini, M.**: Plasma-Membrane Calcium Pump: Structure and Function. *Encyclopedia of Biological Chemistry*. 2<sup>nd</sup> edition Edited by W. Lennarz, D.M. Lane, Elsevier (2013), Vol. 3, pp. 525-529. Waltham, MA: Academic Press.
128. Rizzuto, R., **Brini, M.**: Calcium Transport in Mitochondria. *Encyclopedia of Biological Chemistry*. 2<sup>nd</sup> edition Edited by W. Lennarz, D.M. Lane, (2013) Vol. 1, pp. 347-352. Waltham, MA: Academic Press..
129. **Brini, M.**: Calcium Oscillations. *Encyclopedia of Biological Chemistry*. 2<sup>nd</sup> edition Edited by W. Lennarz, D.M. Lane, (2013) Vol. 3, pp. 322-325. Waltham, MA: Academic Press.
130. **Brini, M.** ,Carafoli, E. Mammalian Calcium Pumps in Health and Disease. *Cardiac Electrophysiology: From Cell to Bedside, 6th edition* Editors Zipes & Jalife, Saunders Elsevier, (2013) chapter 5, pp.43-53. ISBN: 978-1-4557-2856-5
131. Cali, T. Ottolini, D., **Brini, M.** Mitochondrial calcium homeostasis and implications for human health. *Food and Nutritional Components in Focus: Calcium: Chemistry, Analysis, Function and Effects n.10* Edited by V. R. Preedy, The Royal Society of Chemistry (2015), chapter 27, pp. 448-467, ISSN 2045-1695, doi. 10.1039/9781782622130
132. Cali, T. Ottolini, D., **Brini, M.** The plasma membrane Ca<sup>2+</sup> ATPases: isoforms specificity and functional versatility. *Regulation of Ca<sup>2+</sup>-ATPases, V-ATPases and F-ATPases, under the Series "Advances in Biochemistry in Health and Disease"*, Edited by S. Chakraborti and N.S. Dhalla, Springer, New York.(2015), chapter 2. pp. 13-26.
133. **Brini, M.** ,Carafoli, E. Mammalian Calcium Pumps in Health and Disease. *Cardiac Electrophysiology: From Cell to Bedside, 7th edition* Editors Douglas Zipes Jose Jalife William Stevenson, Saunders Elsevier, (2017) chapter 5, pp.49-60. ISBN: 9780323447331

134. Vallese, F. Barazzuol, L., Maso, L., **Brini, M.**, Cali, T. ER-Mitochondria Calcium Transfer, Organelle Contacts and Neurodegenerative Diseases. In: (a cura di): Md. S. Islam (ed.), Calcium Signaling. *Advances in Experimental Medicine and Biology*, vol. 1131, Springer Nature Switzerland AG 2019, ISSN: 2367-0177, doi: 10.1007/978-3-030-12457-1\_28 (*in press*)