

PUBLICATION LIST updated to November 2016

111. Chiara Vidoni, Andrea Castiglioni, Christian Seca, Eleonora Secomandi, Mariarosa A.B. Melone and Ciro Isidoro. Dopamine exacerbates mutant Huntingtin toxicity via oxidative-mediated inhibition of autophagy in SH-SY5Y neuroblastoma cells: beneficial effects of anti-oxidant therapeutics. *Neurochem. Int* 2016 (advanced publication; in press)
doi:10.1016/j.neuint.2016.11.003

110. Suratchanee Phadngam-Andrea Castiglioni, Alessandra Ferraresi, Federica Morani, Carlo Follo, Ciro Isidoro. PTEN dephosphorylates AKT to prevent the expression of GLUT1 on plasmamembrane and to limit glucose consumption in cancer cells. *Oncotarget* 2016 Nov 4. doi: 10.18632/oncotarget.13113. [Epub ahead of print] PMID: 27829222

109. Ferraresi A, Phadngam S, Morani F, Galetto A, Alabiso O, Chiorino G, Isidoro C. Resveratrol inhibits IL-6-induced ovarian cancer cell migration through epigenetic up-regulation of autophagy. *Mol Carcinog.* 2016 Oct 27. doi:10.1002/mc.22582. [Epub ahead of print] PubMed PMID: 27787915.

108: Saowaros Suwansa-ard , Wilairat Kankuan, Tipsuda Thongbuakaew, Jirawat Saetan, Napamane Kornthong, Thanapong Kruangkum, Kanjana Khornchatri, Scott F. Cummins, Ciro Isidoro*, Prasert Sobhon*. Transcriptomic analysis of the autophagy machinery in crustaceans: homology to human autophagy. *BMC Genomics.* 2016 Aug 9;17:587. doi:10.1186/s12864-016-2996-4. PubMed PMID: 27506197; PubMed Central PMCID:PMC4979118.

107: Fortini P, Iorio E, Dogliotti E, Isidoro C. Coordinated Metabolic Changes and Modulation of Autophagy during Myogenesis. *Front Physiol.* 2016 Jun 16;7:237. doi:10.3389/fphys.2016.00237. eCollection 2016. PubMed PMID: 27378945; PubMed Central PMCID: PMC4909729.

106: Pascucci B, D'Errico M, Romagnoli A, De Nuccio C, Savino M, Pietraforte D, Lanzafame M, Calcagnile AS, Fortini P, Baccarini S, Orioli D, Degan P, Visentin S, Stefanini M, Isidoro C, Fimia GM, Dogliotti E. Overexpression of parkin rescues the defective mitochondrial phenotype and the increased apoptosis of Cockayne Syndrome A cells. *Oncotarget.* 2016 Jun 9. doi: 10.18632/oncotarget.9913. PubMed PMID: 27303919.

105: Vidoni C, Follo C, Savino M, Melone MA, Isidoro C. The Role of Cathepsin D in the Pathogenesis of Human Neurodegenerative Disorders. *Med Res Rev.* 2016 Apr 26. doi: 10.1002/med.21394. [Epub ahead of print] Review. PubMed PMID: 27114232.

104: Fortini P, Ferretti C, Iorio E, Cagnin M, Garribba L, Pietraforte D, Falchi M, Pascucci B, Baccarini S, Morani F, Phadngam S, De Luca G, Isidoro C*, Dogliotti E*. The fine tuning of metabolism, autophagy and differentiation during in vitro myogenesis. *Cell Death Dis.* 2016 Mar 31;7:e2168. doi: 10.1038/cddis.2016.50. PubMed PMID: 27031965; PubMed Central PMCID: PMC4823951. (*) senior co-author/co-corresponding author

103: Isidoro C, Huang CC, Sheen LY. Publishing scientifically sound papers in Traditional and Complementary Medicine. *J Tradit Complement Med.* 2016 Jan 16;6(1):1-4. doi: 10.1016/j.jtcme.2015.12.005. eCollection 2016 Jan. PubMed PMID:26933641; PubMed Central PMCID: PMC4765763.

102: Isidoro C, Huang CC, Sheen LY. Report from the Second International Conference of Traditional and Complementary Medicine on Health 2015. *J Tradit Complement Med.* 2016 Jan

16;6(1):5-9. doi: 10.1016/j.jtcme.2016.01.001. eCollection 2016 Jan. PubMed PMID: 26870692; PubMed Central PMCID: PMC4738037.

101: Klionsky DJ, Abdelmohsen K, Abe A, Abedin MJ, Abeliovich H, (.....), Isidoro C, (.....), Zughailer SM. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*. 2016;12(1):1-222. doi: 10.1080/15548627.2015.1100356. Erratum in: *Autophagy*. 2016;12(2):443. Selliez, Iban [corrected to Seiliez, Iban]. PubMed PMID: 26799652; PubMed Central PMCID: PMC4835977.

100: Janda E*, Lascala A, Carresi C, Parafati M, Aprigliano S, Russo V, Savoia C, Ziviani E, Musolino V, Morani F, Isidoro C*, Mollace V. Parkinsonian toxin-induced oxidative stress inhibits basal autophagy in astrocytes via NQO2/quinone oxidoreductase 2: Implications for neuroprotection. *Autophagy*. 2015;11(7):1063-80. doi: 10.1080/15548627.2015.1058683. PubMed PMID: 26046590; PubMed Central PMCID: PMC4590600.

99: Ciro Isidoro, Yong Sang Song, Young-Joon Surh, Danny N. Dhanasekaran. The second annual conference of International ovarian cancer consortium and the symposium on tumor microenvironment and therapeutic resistance. *Genes Cancer*. 2016 January; 7(1-2): 7–12. PMCID: PMC4773701

98: Carniato, F., Tei, L., Phadngam, S., Isidoro, C*. and Botta, M*. NaGdF₄ Nanoparticles Coated with Functionalised Ethylenediaminetetraacetic Acid as Versatile Probes for Dual Optical and Magnetic Resonance Imaging. *ChemPlusChem*, (2015), 80: 503–510. doi: 10.1002/cplu.201402245

97: Parafati M, Lascala A, Morittu VM, Trimboli F, Rizzuto A, Brunelli E, Coscarelli F, Costa N, Britti D, Ehrlich J, Isidoro C, Mollace V, Janda E. Bergamot polyphenol fraction prevents nonalcoholic fatty liver disease via stimulation of lipophagy in cafeteria diet-induced rat model of metabolic syndrome. *J Nutr Biochem*. 2015 Sep;26(9):938-48. doi:10.1016/j.jnutbio.2015.03.008. Epub 2015 Apr 28. PubMed PMID: 26025327.

96: Adewale OO, Brimson JM, Odunola OA, Gbadegesin MA, Owumi SE, Isidoro C*, Tencomnao T*. The Potential for Plant Derivatives against Acrylamide Neurotoxicity. *Phytother Res*. 2015 Jul;29(7):978-85. doi: 10.1002/ptr.5353. Epub 2015 Apr 17. Review. PubMed PMID: 25886076.

95: Tang H, Sebti S, Titone R, Zhou Y, Isidoro C, Ross TS, Hibshoosh H, Xiao G, Packer M, Xie Y, Levine B. Decreased BECN1 mRNA Expression in Human Breast Cancer is Associated with Estrogen Receptor-Negative Subtypes and Poor Prognosis. *EBioMedicine*. 2015 Mar;2(3):255-263. PubMed PMID: 25825707; PubMed Central PMCID: PMC4376376.

94: Morani F, Phadngam S, Follo C, Titone R, Thongrakard V, Galetto A, Alabiso O, Isidoro C. PTEN deficiency and mutant p53 confer glucose-addiction to thyroid cancer cells: impact of glucose depletion on cell proliferation, cell survival, autophagy and cell migration. *Genes Cancer*. 2014 Jul;5(7-8):226-39. PubMed PMID: 25221641; PubMed Central PMCID: PMC4162142.

93: Valente G, Morani F, Nicotra G, Fusco N, Peracchio C, Titone R, Alabiso O, Arisio R, Katsaros D, Benedetto C, Isidoro C. Expression and clinical significance of the autophagy proteins BECLIN 1 and LC3 in ovarian cancer. *Biomed Res Int*. 2014;2014:462658. doi: 10.1155/2014/462658. Epub 2014 Jul 17. PubMed PMID: 25136588; PubMed Central PMCID: PMC4127242.

92: Morani F, Phadngam S, Follo C, Titone R, Aimaretti G, Galetto A, Alabiso O, Isidoro C. PTEN regulates plasma membrane expression of glucose transporter 1 and glucose uptake in thyroid

cancer cells. *J Mol Endocrinol*. 2014 Oct;53(2):247-58. doi: 10.1530/JME-14-0118. Epub 2014 Aug 14. PubMed PMID: 25125078.

91: Thongrakard V, Titone R, Follo C, Morani F, Suksamrarn A, Tencomnao T, Isidoro C. Turmeric toxicity in A431 epidermoid cancer cells associates with autophagy degradation of anti-apoptotic and anti-autophagic p53 mutant. *Phytother Res*. 2014 Dec;28(12):1761-9. doi: 10.1002/ptr.5196. Epub 2014 Jul 11. PubMed PMID: 25044209.

90: Shuvayeva G, Bobak Y, Igumentseva N, Titone R, Morani F, Stasyk O, Isidoro C. Single amino acid arginine deprivation triggers prosurvival autophagic response in ovarian carcinoma SKOV3. *Biomed Res Int*. 2014;2014:505041. doi:10.1155/2014/505041. Epub 2014 Jun 1. PubMed PMID: 24987688; PubMed Central PMCID: PMC4058691.

89: Titone R, Morani F, Follo C, Vidoni C, Mezzanzanica D, Isidoro C. Epigenetic control of autophagy by microRNAs in ovarian cancer. *Biomed Res Int*. 2014;2014:343542. doi: 10.1155/2014/343542. Epub 2014 Apr 30. PubMed PMID:24877083; PubMed Central PMCID: PMC4022060.

88: C Vidoni, R Titone, F Morani, C Follo, C Isidoro. Epigenetic control of autophagy in cancer: the role of microRNAs. *Minerva Biotechnologica* 2014, 26 (2), 87-92

87: Morani F, Titone R, Pagano L, Galetto A, Alabiso O, Aimaretti G, Isidoro C. Autophagy and thyroid carcinogenesis: genetic and epigenetic links. *Endocr Relat Cancer*. 2013 Dec 16;21(1):R13-29. doi: 10.1530/ERC-13-0271. Print 2014 Feb. Review. PubMed PMID: 24163390.

86: Thongrakard V, Ruangrunsi N, Ekkapongpisit M, Isidoro C, Tencomnao T. Protection from UVB Toxicity in Human Keratinocytes by Thailand Native Herbs Extracts. *Photochem Photobiol*. 2013 Aug 12. doi: 10.1111/php.12153. PubMed PMID: 23931284.

85: Follo C, Ozzano M, Montalenti C, Santoro MM, Isidoro C. Knockdown of cathepsin D in zebrafish fertilized eggs determines congenital myopathy. *Biosci Rep*. 2013 Apr 4;33(2):e00034. doi: 10.1042/BSR20120100. PubMed PMID: 23464837; PubMed Central PMCID: PMC3616520.

84: Follo C, Ozzano M, Montalenti C, Ekkapongpisit M, Isidoro C. Similarities and differences in the biogenesis, processing and lysosomal targeting between zebrafish and human pro-Cathepsin D: functional implications. *Int J Biochem Cell Biol*. 2013 Feb;45(2):273-82. doi: 10.1016/j.biocel.2012.10.010. Epub 2012 Oct 27. PubMed PMID: 23107604.

83: Peracchio C, Alabiso O, Valente G, Isidoro C. Involvement of autophagy in ovarian cancer: a working hypothesis. *J Ovarian Res*. 2012 Sep 13;5(1):22. doi:10.1186/1757-2215-5-22. PubMed PMID: 22974323; PubMed Central PMCID: PMC3506510.

82: Klionsky DJ, Abdalla FC, Abeliovich H, Abraham RT, Acevedo-Arozena A, (.....), Isidoro C, (.....), Zuckerbraun B. Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*. 2012 Apr;8(4):445-544. PubMed PMID: 22966490; PubMed Central PMCID:PMC3404883.

81: Ekkapongpisit M, Giovia A, Follo C, Caputo G, Isidoro C. Biocompatibility, endocytosis, and intracellular trafficking of mesoporous silica and polystyrene nanoparticles in ovarian cancer cells: effects of size and surface charge groups. *Int J Nanomedicine*. 2012;7:4147-58. doi: 10.2147/IJN.S33803. Epub 2012 Jul 31. PubMed PMID: 22904626; PubMed Central PMCID: PMC3418080.

- 80: Janda E, Isidoro C, Carresi C, Mollace V. Defective autophagy in Parkinson's disease: role of oxidative stress. *Mol Neurobiol.* 2012 Dec;46(3):639-61. doi:10.1007/s12035-012-8318-1. Epub 2012 Aug 17. Review. PubMed PMID: 22899187.
- 79: Cagnin M, Ozzano M, Bellio N, Fiorentino I, Follo C, Isidoro C. Dopamine induces apoptosis in APP^{swe}-expressing Neuro2A cells following Pepstatin-sensitive proteolysis of APP in acid compartments. *Brain Res.* 2012 Aug 30;1471:102-17. doi: 10.1016/j.brainres.2012.06.025. Epub 2012 Jul 6. PubMed PMID: 22771396.
- 78: Fortini P, Ferretti C, Pascucci B, Narciso L, Pajalunga D, Puggioni EM, Castino R, Isidoro C, Crescenzi M, Dogliotti E. DNA damage response by single-strand breaks in terminally differentiated muscle cells and the control of muscle integrity. *Cell Death Differ.* 2012 Nov;19(11):1741-9. doi:10.1038/cdd.2012.53. Epub 2012 Jun 15. PubMed PMID: 22705848; PubMed Central PMCID: PMC3469061.
- 77: Ekkapongpisit M, Giovia A, Nicotra G, Ozzano M, Caputo G, Isidoro C. Labeling and exocytosis of secretory compartments in RBL mastocytes by polystyrene and mesoporous silica nanoparticles. *Int J Nanomedicine.* 2012;7:1829-40. doi:10.2147/IJN.S29034. Epub 2012 Apr 4. PubMed PMID: 22605932; PubMed Central PMCID:PMC3352688.
- 76: Morani F, Pagano L, Prodam F, Aimaretti G, Isidoro C. Loss of expression of the oncosuppressor PTEN in thyroid incidentalomas associates with GLUT1 plasmamembrane expression. *Panminerva Med.* 2012 Jun;54(2):59-63. PubMed PMID:22525560.
- 75: Panyasrivanit M, Greenwood MP, Murphy D, Isidoro C, Auewarakul P, Smith DR. Induced autophagy reduces virus output in dengue infected monocytic cells. *Virology.* 2011 Sep 15;418(1):74-84. doi: 10.1016/j.virol.2011.07.010. Epub 2011 Aug 2. PubMed PMID: 21813150.
- 74: Follo C, Ozzano M, Mugoni V, Castino R, Santoro M, Isidoro C. Knock-down of cathepsin D affects the retinal pigment epithelium, impairs swim-bladder ontogenesis and causes premature death in zebrafish. *PLoS One.* 2011;6(7):e21908. doi: 10.1371/journal.pone.0021908. Epub 2011 Jul 1. PubMed PMID: 21747967; PubMed Central PMCID: PMC3128622.
- 73: R Veneroni, C Peracchio, R Castino, C Isidoro Patented biomarkers for the early detection of ovarian cancer *Recent Patents on Biomarkers* 2011, 1 (1), 1-9
- 72: Castino R, Fiorentino I, Cagnin M, Giovia A, Isidoro C. Chelation of lysosomal iron protects dopaminergic SH-SY5Y neuroblastoma cells from hydrogen peroxide toxicity by precluding autophagy and Akt dephosphorylation. *Toxicol Sci.* 2011 Oct;123(2):523-41. doi: 10.1093/toxsci/kfr179. Epub 2011 Jul 8. PubMed PMID:21742779; PubMed Central PMCID: PMC3218672.
- 71: Pagano L, Samà MT, Morani F, Prodam F, Rudoni M, Boldorini R, Valente G, Marzullo P, Baldelli R, Appetecchia M, Isidoro C, Aimaretti G. Thyroid incidentaloma identified by ¹⁸F-fluorodeoxyglucose positron emission tomography with CT (FDG-PET/CT): clinical and pathological relevance. *Clin Endocrinol (Oxf).* 2011 Oct;75(4):528-34. doi: 10.1111/j.1365-2265.2011.04107.x. PubMed PMID:21575027.
- 70: Castino R, Pucer A, Veneroni R, Morani F, Peracchio C, Lah TT, Isidoro C. Resveratrol reduces the invasive growth and promotes the acquisition of a long-lasting differentiated phenotype in human glioblastoma cells. *J Agric Food Chem.* 2011 Apr 27;59(8):4264-72. doi:10.1021/jf104917q. Epub 2011 Mar 11. PubMed PMID: 21395220.

- 69: Nicotra G, Castino R, Follo C, Peracchio C, Valente G, Isidoro C. The dilemma: does tissue expression of cathepsin D reflect tumor malignancy? The question: does the assay truly mirror cathepsin D mis-function in the tumor? *Cancer Biomark*. 2010;7(1):47-64. doi: 10.3233/CBM-2010-0143. Review. PubMed PMID:21045264.
- 68: Nicotra G, Manfroi F, Follo C, Castino R, Fusco N, Peracchio C, Kerim S, Valente G, Isidoro C. High expression of cathepsin D in non-Hodgkin's lymphomas negatively impacts on clinical outcome. *Dis Markers*. 2010;28(3):167-83. doi:10.3233/DMA-2010-0698. PubMed PMID: 20534902; PubMed Central PMCID: PMC3833244.
- 67: Castino R, Bellio N, Follo C, Murphy D, Isidoro C. Inhibition of PI3k class III-dependent autophagy prevents apoptosis and necrosis by oxidative stress in dopaminergic neuroblastoma cells. *Toxicol Sci*. 2010 Sep;117(1):152-62. doi:10.1093/toxsci/kfq170. Epub 2010 Jun 4. PubMed PMID: 20525898.
- 66: Nicotra G, Mercalli F, Peracchio C, Castino R, Follo C, Valente G, Isidoro C. Autophagy-active beclin-1 correlates with favourable clinical outcome in non-Hodgkin lymphomas. *Mod Pathol*. 2010 Jul;23(7):937-50. doi:10.1038/modpathol.2010.80. Epub 2010 May 14. PubMed PMID: 20473282.
- 65: Gianotti E, Bertolino CA, Benzi C, Nicotra G, Caputo G, Castino R, Isidoro C, Coluccia S. Photoactive hybrid nanomaterials: indocyanine immobilized in mesoporous MCM-41 for "in-cell" bioimaging. *ACS Appl Mater Interfaces*. 2009 Mar;1(3):678-87. doi: 10.1021/am800196r. PubMed PMID: 20355990.
- 64: Pucer A, Castino R, Mirković B, Falnoga I, Slejkovec Z, Isidoro C, Lah TT. Differential role of cathepsins B and L in autophagy-associated cell death induced by arsenic trioxide in U87 human glioblastoma cells. *Biol Chem*. 2010 May;391(5):519-31. doi: 10.1515/BC.2010.050. PubMed PMID: 20302512.
- 63: Pietronave S, Forte G, Locarno D, Merlin S, Zamperone A, Nicotra G, Isidoro C, Nardo PD, Prat M. Agonist monoclonal antibodies against HGF receptor protect cardiac muscle cells from apoptosis. *Am J Physiol Heart Circ Physiol*. 2010 Apr;298(4):H1155-65. doi: 10.1152/ajpheart.01323.2008. Epub 2010 Jan 8. PubMed PMID: 20061536.
- 62: Valente G, Nicotra G, Arrondini M, Castino R, Capparuccia L, Prat M, Kerim S, Tamagnone L, Isidoro C. Co-expression of plexin-B1 and Met in human breast and ovary tumours enhances the risk of progression. *Cell Oncol*. 2009;31(6):423-36. doi: 10.3233/CLO-2009-0504. PubMed PMID: 19940359; PubMed Central PMCID: PMC4619042.
- 61: Isidoro C, Biagioni F, Giorgi FS, Fulceri F, Paparelli A, Fornai F. The role of autophagy on the survival of dopamine neurons. *Curr Top Med Chem*. 2009;9(10):869-79. Review. PubMed PMID: 19754403.
- 60: Pasquali L, Longone P, Isidoro C, Ruggieri S, Paparelli A, Fornai F. Autophagy, lithium, and amyotrophic lateral sclerosis. *Muscle Nerve*. 2009 Aug;40(2):173-94. doi: 10.1002/mus.21423. Review. PubMed PMID: 19609902.
- 59: Pasquali L, Lazzeri G, Isidoro C, Ruggieri S, Paparelli A, Fornai F. Role of autophagy during methamphetamine neurotoxicity. *Ann N Y Acad Sci*. 2008 Oct;1139:191-6. doi: 10.1196/annals.1432.016. PubMed PMID: 18991864.
- 58: Castino R, Thepparit C, Bellio N, Murphy D, Isidoro C. Akt induces apoptosis in neuroblastoma cells expressing a C98X vasopressin mutant following autophagy suppression. *J*

Neuroendocrinol. 2008 Oct;20(10):1165-75. doi:10.1111/j.1365-2826.2008.01769.x. Epub 2008 Jul 30. PubMed PMID: 18673414.

57: Castino R, Peracchio C, Salini A, Nicotra G, Trincheri NF, Démoz M, Valente G, Isidoro C. Chemotherapy drug response in ovarian cancer cells strictly depends on a cathepsin D-Bax activation loop. *J Cell Mol Med*. 2009 Jun;13(6):1096-109. doi: 10.1111/j.1582-4934.2008.00435.x. Epub 2008 Jul 24. PubMed PMID: 18657225; PubMed Central PMCID: PMC4496106.

56: Castino R, Lazzeri G, Lenzi P, Bellio N, Follo C, Ferrucci M, Fornai F, Isidoro C. Suppression of autophagy precipitates neuronal cell death following low doses of methamphetamine. *J Neurochem*. 2008 Aug;106(3):1426-39. doi:10.1111/j.1471-4159.2008.05488.x. Epub 2008 May 19. PubMed PMID: 18489716.

55: Castino R, Delpal S, Bouguyon E, Demoz M, Isidoro C, Ollivier-Bousquet M. Prolactin promotes the secretion of active cathepsin D at the basal side of rat mammary acini. *Endocrinology*. 2008 Aug;149(8):4095-105. doi:10.1210/en.2008-0249. Epub 2008 Apr 17. PubMed PMID: 18420735; PubMed Central PMCID: PMC2488222.

54: Fornai F, Longone P, Ferrucci M, Lenzi P, Isidoro C, Ruggieri S, Paparelli A. Autophagy and amyotrophic lateral sclerosis: The multiple roles of lithium. *Autophagy*. 2008 May;4(4):527-30. Epub 2008 Mar 17. PubMed PMID: 18367867.

53: Hamano T, Gendron TF, Causevic E, Yen SH, Lin WL, Isidoro C, Deture M, Ko LW. Autophagic-lysosomal perturbation enhances tau aggregation in transfectants with induced wild-type tau expression. *Eur J Neurosci*. 2008 Mar;27(5):1119-30. doi:10.1111/j.1460-9568.2008.06084.x. Epub 2008 Feb 22. PubMed PMID: 18294209.

52: Fornai F, Longone P, Cafaro L, Kastsiuchenka O, Ferrucci M, Manca ML, Lazzeri G, Spalloni A, Bellio N, Lenzi P, Modugno N, Siciliano G, Isidoro C, Murri L, Ruggieri S, Paparelli A. Lithium delays progression of amyotrophic lateral sclerosis. *Proc Natl Acad Sci U S A*. 2008 Feb 12;105(6):2052-7. doi: 10.1073/pnas.0708022105. Epub 2008 Feb 4. Erratum in: *Proc Natl Acad Sci U S A*. 2008 Oct 21;105(42):16404-7. PubMed PMID: 18250315; PubMed Central PMCID:PMC2538879.

51: Trincheri NF, Follo C, Nicotra G, Peracchio C, Castino R, Isidoro C. Resveratrol-induced apoptosis depends on the lipid kinase activity of Vps34 and on the formation of autophagolysosomes. *Carcinogenesis*. 2008 Feb;29(2):381-9. Epub 2007 Nov 28. PubMed PMID: 18048384.

50: Erdmann S, Ricken A, Merkwitz C, Struman I, Castino R, Hummitzsch K, Gaunitz F, Isidoro C, Martial J, Spanel-Borowski K. The expression of prolactin and its cathepsin D-mediated cleavage in the bovine corpus luteum vary with the estrous cycle. *Am J Physiol Endocrinol Metab*. 2007 Nov;293(5):E1365-77. Epub 2007 Sep 4. PubMed PMID: 17785503.

49: Follo C, Isidoro C. A fast and simple method for simultaneous mixed site-specific mutagenesis of a wide coding sequence. *Biotechnol Appl Biochem*. 2008 Feb;49(Pt 2):175-83. PubMed PMID: 17640176.

48: Castino R, Bellio N, Nicotra G, Follo C, Trincheri NF, Isidoro C. Cathepsin D-Bax death pathway in oxidative stressed neuroblastoma cells. *Free Radic Biol Med*. 2007 May 1;42(9):1305-16. Epub 2007 Jan 8. PubMed PMID: 17395004.

- 47: Follo C, Castino R, Nicotra G, Trincheri NF, Isidoro C. Folding, activity and targeting of mutated human cathepsin D that cannot be processed into the double-chain form. *Int J Biochem Cell Biol.* 2007;39(3):638-49. Epub 2006 Nov 25. PubMed PMID: 17188016.
- 46: Trincheri NF, Nicotra G, Follo C, Castino R, Isidoro C. Resveratrol induces cell death in colorectal cancer cells by a novel pathway involving lysosomal cathepsin D. *Carcinogenesis.* 2007 May;28(5):922-31. Epub 2006 Nov 20. PubMed PMID: 17116725.
- 45: Carini R, Trincheri NF, Alchera E, De Cesaris MG, Castino R, Splendore R, Albano E, Isidoro C. PI3K-dependent lysosome exocytosis in nitric oxide-preconditioned hepatocytes. *Free Radic Biol Med.* 2006 May 15;40(10):1738-48. Epub 2006 Feb 7. PubMed PMID: 16678013.
- 44: Valente G, Mamo C, Bena A, Prudente E, Cavaliere C, Kerim S, Nicotra G, Comino A, Palestro G, Isidoro C, Beatrice F. Prognostic significance of microvessel density and vascular endothelial growth factor expression in sinonasal carcinomas. *Hum Pathol.* 2006 Apr;37(4):391-400. Epub 2006 Feb 8. PubMed PMID: 16564912.
- 43: Valente G, Manfroi F, Peracchio C, Nicotra G, Castino R, Nicosia G, Kerim S, Isidoro C. cFLIP expression correlates with tumour progression and patient outcome in non-Hodgkin lymphomas of low grade of malignancy. *Br J Haematol.* 2006 Mar;132(5):560-70. PubMed PMID: 16445828.
- 42: Démoz M, Castino R, Follo C, Hasilik A, Sloane BF, Isidoro C. High yield synthesis and characterization of phosphorylated recombinant human procathepsin D expressed in mammalian cells. *Protein Expr Purif.* 2006 Jan;45(1):157-67. Epub 2005 Aug 19. PubMed PMID: 16242956.
- 41: Castino R, Davies J, Beaucourt S, Isidoro C, Murphy D. Autophagy is a prosurvival mechanism in cells expressing an autosomal dominant familial neurohypophyseal diabetes insipidus mutant vasopressin transgene. *FASEB J.* 2005 Jun;19(8):1021-3. Epub 2005 Mar 21. PubMed PMID: 15781609.
- 40: Castino R, Isidoro C, Murphy D. Autophagy-dependent cell survival and cell death in an autosomal dominant familial neurohypophyseal diabetes insipidus in vitro model. *FASEB J.* 2005 Jun;19(8):1024-6. Epub 2005 Mar 21. PubMed PMID: 15781608.
- 39: Lkhider M, Castino R, Bouguyon E, Isidoro C, Ollivier-Bousquet M. Cathepsin D released by lactating rat mammary epithelial cells is involved in prolactin cleavage under physiological conditions. *J Cell Sci.* 2004 Oct 1;117(Pt 21):5155-64. PubMed PMID: 15456852.
- 38: Green SK, Francia G, Isidoro C, Kerbel RS. Antiadhesive antibodies targeting E-cadherin sensitize multicellular tumor spheroids to chemotherapy in vitro. *Mol Cancer Ther.* 2004 Feb;3(2):149-59. PubMed PMID: 14985455.
- 37: Carini R, Castino R, De Cesaris MG, Splendore R, Démoz M, Albano E, Isidoro C. Preconditioning-induced cytoprotection in hepatocytes requires Ca²⁺-dependent exocytosis of lysosomes. *J Cell Sci.* 2004 Mar 1;117(Pt 7):1065-77. Epub 2004 Feb 17. PubMed PMID: 14970255.
- 36: Castino R, Démoz M, Isidoro C. Destination 'lysosome': a target organelle for tumour cell killing? *J Mol Recognit.* 2003 Sep-Oct;16(5):337-48. Review. PubMed PMID: 14523947.
- 35: Démoz M, Castino R, Cesaro P, Baccino FM, Bonelli G, Isidoro C. Endosomal-lysosomal proteolysis mediates death signalling by TNFalpha, not by etoposide, in L929 fibrosarcoma cells:

- evidence for an active role of cathepsin D. *Biol Chem.* 2002 Jul-Aug;383(7-8):1237-48. PubMed PMID: 12437111.
- 34: De Stefanis D, Reffo P, Bonelli G, Baccino FM, Sala G, Ghidoni R, Codogno P, Isidoro C. Increase in ceramide level alters the lysosomal targeting of cathepsin D prior to onset of apoptosis in HT-29 colon cancer cells. *Biol Chem.* 2002 Jun;383(6):989-99. PubMed PMID: 1222689.
- 33: Castino R, Pace D, Démoz M, Gargiulo M, Ariatta C, Raiteri E, Isidoro C. Lysosomal proteases as potential targets for the induction of apoptotic cell death in human neuroblastomas. *Int J Cancer.* 2002 Feb 20;97(6):775-9. PubMed PMID: 11857353.
- 32: Cesaro P, Raiteri E, Démoz M, Castino R, Baccino FM, Bonelli G, Isidoro C. Expression of protein kinase C beta1 confers resistance to TNFalpha- and paclitaxel-induced apoptosis in HT-29 colon carcinoma cells. *Int J Cancer.* 2001 Jul 15;93(2):179-84. PubMed PMID: 11410863.
- 31: Dragonetti A, Baldassarre M, Castino R, Démoz M, Luini A, Buccione R, Isidoro C. The lysosomal protease cathepsin D is efficiently sorted to and secreted from regulated secretory compartments in the rat basophilic/mast cell line RBL. *J Cell Sci.* 2000 Sep;113 (Pt 18):3289-98. PubMed PMID: 10954426.
- 30: Baldassarre M, Dragonetti A, Marra P, Luini A, Isidoro C, Buccione R. Regulation of protein sorting at the TGN by plasma membrane receptor activation. *J Cell Sci.* 2000 Feb;113 (Pt 4):741-8. PubMed PMID: 10652266.
- 29: Démoz M, Castino R, Dragonetti A, Raiteri E, Baccino FM, Isidoro C. Transformation by oncogenic ras-p21 alters the processing and subcellular localization of the lysosomal protease cathepsin D. *J Cell Biochem.* 1999 Jun 1;73(3):370-8. PubMed PMID: 10321836.
- 28: Chiarpotto E, Domenicotti C, Paola D, Vitali A, Nitti M, Pronzato MA, Biasi F, Cottalasso D, Marinari UM, Dragonetti A, Cesaro P, Isidoro C, Poli G. Regulation of rat hepatocyte protein kinase C beta isoenzymes by the lipid peroxidation product 4-hydroxy-2,3-nonenal: A signaling pathway to modulate vesicular transport of glycoproteins. *Hepatology.* 1999 May;29(5):1565-72. PubMed PMID: 10216144.
- 27: Bening U, Castino R, Harth N, Isidoro C, Hasilik A. Lysosomal segregation of a mannose-rich glycoprotein imparted by the prosequence of myeloperoxidase. *J Cell Biochem.* 1998 Nov 1;71(2):158-68. PubMed PMID: 9779815.
- 26: Di Ianni F, Di Ianni G, Isidoro C, Migliorato L, Piersante S. On a case of "Macrodystrophia lipomatosa". *Eur Rev Med Pharmacol Sci.* 1997 Sep-Oct;1(5):173-6. PubMed PMID: 9630760.
- 25: Isidoro C, Baccino FM, Hasilik A. Human and hamster procathepsin D, although equally tagged with mannose-6-phosphate, are differentially targeted to lysosomes in transfected BHK cells. *Cell Tissue Res.* 1998 May;292(2):303-10. PubMed PMID:9560473.
- 24: Isidoro C, De Stefanis D, Démoz M, Ogier-Denis E, Codogno P, Baccino FM. Expression and posttranslational fate of cathepsin D in HT-29 tumor cells depend on their enterocytic differentiation state. *Cell Growth Differ.* 1997 Sep;8(9):1029-37. PubMed PMID: 9300184.
- 23: De Stefanis D, Démoz M, Dragonetti A, Houri JJ, Ogier-Denis E, Codogno P, Baccino FM, Isidoro C. Differentiation-induced changes in the content, secretion, and subcellular distribution of lysosomal cathepsins in the human colon cancer HT-29 cell line. *Cell Tissue Res.* 1997 Jul;289(1):109-17. PubMed PMID: 9182605.

- 22: Isidoro C, Baccino FM, Hasilik A. Mis-sorting of procathepsin D in metastogenic tumor cells is not due to impaired synthesis of the phosphomannosyl signal. *Int J Cancer*. 1997 Mar 4;70(5):561-6. PubMed PMID: 9052756.
- 21: Isidoro C, Démoz M, De Stefanis D, Baccino FM, Hasilik A, Bonelli G. Differential targeting and processing of procathepsin D in normal and transformed murine 3T3 fibroblasts. *Int J Cancer*. 1997 Jan 27;70(3):310-4. PubMed PMID:9033633.
- 20: Isidoro C, Maggioni C, Demoz M, Pizzagalli A, Fra AM, Sitia R. Exposed thiols confer localization in the endoplasmic reticulum by retention rather than retrieval. *J Biol Chem*. 1996 Oct 18;271(42):26138-42. PubMed PMID: 8824258.
- 19: Isidoro C, Demoz M, De Stefanis D, Baccino FM, Bonelli G. Synthesis, maturation and extracellular release of procathepsin D as influenced by cell proliferation or transformation. *Int J Cancer*. 1995 Dec 11;63(6):866-71. PubMed PMID: 8847147.
- 18: Hourii JJ, Ogier-Denis E, De Stefanis D, Bauvy C, Baccino FM, Isidoro C, Codogno P. Differentiation-dependent autophagy controls the fate of newly synthesized N-linked glycoproteins in the colon adenocarcinoma HT-29 cell line. *Biochem J*. 1995 Jul 15;309 (Pt 2):521-7. PubMed PMID: 7626015; PubMed Central PMCID: PMC1135762.
- 17: Ogier-Denis E, Bauvy C, Couvineau A, De Stefanis D, Isidoro C, Codogno P. Localization and processing of glycosylphosphatidylinositol anchored cathepsin D. *Biochem Biophys Res Commun*. 1995 Jun 26;211(3):935-42. PubMed PMID: 7598725.
- 16: Ogier-Denis E, Couvineau A, Maoret JJ, Hourii JJ, Bauvy C, De Stefanis D, Isidoro C, Laburthe M, Codogno P. A heterotrimeric Gi3-protein controls autophagic sequestration in the human colon cancer cell line HT-29. *J Biol Chem*. 1995 Jan 6;270(1):13-6. PubMed PMID: 7814364.
- 15: Isidoro C, Demoz M, De Stefanis D, Mainferme F, Wattiaux R, Baccino FM. Altered intracellular processing and enhanced secretion of procathepsin D in a highly deviated rat hepatoma. *Int J Cancer*. 1995 Jan 3;60(1):61-4. PubMed PMID:7814153.
- 14: Isidoro C, Démoz M, De Stefanis D, Baccino FM, Bonelli G. High levels of proteolytic enzymes in the ascitic fluid and plasma of rats bearing the Yoshida AH-130 hepatoma. *Invasion Metastasis*. 1995;15(3-4):116-24. PubMed PMID: 8621267.
- 13: Isidoro C, De Stefanis D, Demoz M, Alessi D, Pignone E, Roccatello D. Effects of calcitriol on the biogenesis of a lysosomal protease in monocytes from patients with renal failure. *Nephron*. 1994;68(3):389. PubMed PMID: 7838268.
- 12: Roccatello D, Isidoro C, Mazzucco G, Mesiti A, Quattrocchio G, Amore A, Molino A, Coppo R, Sena LM, Piccoli G. Role of monocytes in cryoglobulinemia-associated nephritis. *Kidney Int*. 1993 May;43(5):1150-5. PubMed PMID: 8510395.
- 11: Roccatello D, D'Alfonso S, Peruccio D, Quattrocchio G, Cavalli G, Isidoro C, Piccoli G, Richiardi PM. Induction of mRNA for tumor necrosis factor alpha in hemodialysis. *Kidney Int Suppl*. 1993 Jan;39:S144-8. PubMed PMID: 8468917.
- 10: Roccatello D, Formica M, Cavalli G, Quattrocchio G, Aimò G, Polloni R, Amprimo MC, Molino A, Martina G, Isidoro C, et al. Serum and intracellular detection of cytokines in patients undergoing chronic hemodialysis. *Artif Organs*. 1992 Apr;16(2):131-40. PubMed PMID: 10078234.

- 9: Roccatello D, Picciotto G, Ropolo R, Coppo R, Quattrocchio G, Cacace G, Molino A, Amoroso A, Baccega M, Isidoro C, et al. Kinetics and fate of IgA-IgG aggregates as a model of naturally occurring immune complexes in IgA nephropathy. *Lab Invest.* 1992 Jan;66(1):86-95. PubMed PMID: 1731150.
- 8: Isidoro C, Grässel S, Baccino FM, Hasilik A. Determination of the phosphorylation, uncovering of mannose 6-phosphate groups and targeting of lysosomal enzymes. *Eur J Clin Chem Clin Biochem.* 1991 Mar;29(3):165-71. Erratum in: *Eur J Clin Chem Clin Biochem* 1991 Apr;29(4):followi. PubMed PMID: 2070012.
- 7: Isidoro C, Horst M, Baccino FM, Hasilik A. Differential segregation of human and hamster cathepsin D in transfected baby-hamster kidney cells. *Biochem J.* 1991 Jan 15;273(Pt 2):363-7. PubMed PMID: 1991036; PubMed Central PMCID: PMC1149854.
- 6: Isidoro C, Radons J, Baccino FM, Hasilik A. Suppression of the 'uncovering' of mannose-6-phosphate residues in lysosomal enzymes in the presence of NH₄Cl. *Eur J Biochem.* 1990 Aug 17;191(3):591-7. PubMed PMID: 2167847.
- 5: Radons J, Isidoro C, Hasilik A, Brefeldin A prevents uncovering but not phosphorylation of the recognition marker in cathepsin D. *Biol Chem Hoppe Seyler.* 1990 Jul;371(7):567-73. PubMed PMID: 2222855.
- 4: Bonelli G, Kay J, Tessitore L, Jupp RA, Isidoro C, Norey CG, Autelli R, Richards AD, Baccino FM. Purification and properties of cathepsin D from rat Yoshida ascites hepatoma AH-130. *Biol Chem Hoppe Seyler.* 1988 May;369 Suppl:323-7. PubMed PMID: 3202970.
- 3: Baccino FM, Tessitore L, Bonelli G, Isidoro C. Protein turnover states of tumour cells and host tissues in an experimental model. *Biomed Biochim Acta.* 1986;45(11-12):1585-90. PubMed PMID: 3579877.
- 2: Tessitore L, Bonelli G, Isidoro C, Kazakova OV, Baccino FM. Comparative studies on protein turnover regulations in tumor cells and host tissues: development and analysis of an experimental model. *Toxicol Pathol.* 1986;14(4):451-6. Review. PubMed PMID: 3544167.
- 1: C Isidoro, M Musi, G Bonelli, L Tessitore, Ov Kazakova. Quantification of Cathepsin-D in Tissue-Extracts by improved One-Dimensional Immunoelectrophoresis-comparison with Radioimmunoassay. *IRCS Medical Science-Biochemistry* 1985, 13 (7), 599-600

BOOK CHAPTERS

6. Christian Seca, Andrea Castiglioni, Ciro Isidoro

Essential methods for monitoring Macroautophagy in Mammalian cells. In *Methods in Molecular Biology, Protein Blotting and Detection*, vol. XXX, pagg XXX-XXX (Danny Dhanaskaran and XXXX Editors) © Humana Press, a part of Springer Science + Business Media, DOI: (2016-2017 in press)

5. Ann H. Erickson, Ciro Isidoro, Lukas Mach, John S. Mort

Cathepsins: Getting in Shape for Lysosomal Proteolysis (pp 127-173) in “*Proteases: Structure and Function*” (K Brix and W Stöcker Editors); Springer, Vienna; ISBN: 978-3-7091-0884-0 (Print) 978-3-7091-0885-7 (Online 2014)

4. R Castino, C Isidoro.

The transport of soluble lysosomal hydrolases from the Golgi complex to lysosomes. In “*The Golgi Apparatus*”, 402-413 (Springer Vienna, 2008)

3. C Isidoro, M Hummel, F Baccino, A Hasilik.

The respective role of mannose-6-phosphate residues and of prosaposin in the segregation of lysosomal procathepsin D. In “*Proteolysis in cell function*”, 234-241. (IOS Press Amsterdam, 1997)

2. Francesco Baccino, Luciana Tessitore, Gabriella Bonelli, Riccardo Autelli, Paola Costelli, Ciro Isidoro, Joseph S Amenta.

Protein turnover regulations and mechanisms in neoplastic cells and host tissues. In “*Protein metabolism in aging*” (HL Segal, ed., Alan R. Liss, New York 1989)

1. FM Baccino, R Autelli, G Bonelli, P Costelli, C Isidoro, L Tessitore.

Regulation of Protein Degradation in Neoplastic Cells. In “*Chemical Carcinogenesis*”, 525-533 (Springer US, 1988)