

# Gabriella D'Orazi - *Curriculum vitae*

(updated 23/08/2020)

## Personal information

*Name and surname:* Gabriella D'Orazi

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Web of Science ResearcherID: T-2792-2019

## Education and training

1980: Undergraduate School, Liceo Classico “A. Torlonia“, Avezzano (L'Aquila)

1986: Graduation in Medicine and Surgery, University "La Sapienza", Rome

1987: Medical state licensure examination, Università "La Sapienza", Rome

1988: *International Course:* Seefeld Workshop n. 38 "Cryomethods in Biological Ultramicrotomy and Electron Microscopy", Reichert Technologies, Seefeld, Innsbruck, Austria.

1989: *International Course:* "Trac 2: Recombinant DNA methodology", Foundation for Advanced Education in the Sciences (FAES), National Institutes of Health, Bethesda (MD) USA).

1992: *International Course:* "Trac 10: DNA-binding proteins, transcriptional regulators and homeoboxes: principals and practice", Foundation for Advanced Education in the Sciences (FAES), National Institutes of Health (NIH), Bethesda (MD) USA.

1992: PhD Course in Experimental Medicine, Università "La Sapienza", Rome.

2002: *International Course:* “Diet, Nutrition, and Cancer”, Mediterranean School of Oncology, Rome.

2003: *Master in Human Nutrition*, FIP Nutrizione, Rome.

2004: *Course BLSA and PLSA* (Basic and Pediatric Life Support and Early Defibrillation), Rome.

24/11/2014-24/11/2023: National Scientific qualification MIUR (ASN 2012) as Full Professor, competition sector 06/A2 General and Clinical Pathology.

22/01/2014-22/01/2023: National Scientific qualification MIUR (ASN 2012) as Full Professor, competition sector 05/F1 *Applied Biology*.

17/12/2019 al 17/12/2028: National Scientific qualification MIUR (ASN 2016) as Full Professor, competition sector 06/N1 Laboratory Medicine.

08/01/2014-08/01/2023: National Scientific qualification MIUR (ASN 2012) as Associate Professor, competition sector 06/A2 General and Clinical Pathology.

22/01/2014-22/01/2023: National Scientific qualification MIUR (ASN 2012) as Associate Professor, competition sector 05/F1 *Applied Biology*.

12/02/2014-12/02/2023: National Scientific qualification MIUR (ASN 2012) as Associate Professor, competition sector 05/E2 *Molecular Biology*.

28/06/2014-28/06/2023: National Scientific qualification MIUR (ASN 2012) as Associate Professor, competition sector 06/N1 Laboratory Medicine.

## Work Experience

2017-pres: **Associate Professor in** General and Clinical Pathology, School of Medicine University “G. D'Annunzio”, Chieti.

- 2017-2018: **Guest Professor**, University Roma-Tre, Roma, AA 2017-2018.  
 1997-pres: **Senior scientist** and group leader at “Regina Elena” National Cancer Institute, Rome.  
 1995-1996: **Visiting Scientist** at the “Regina Elena” National Cancer Institute, Rome.  
 1992-1993: **Visiting Associate**, NIH Visiting Program, Laboratory of Pathology, Extracellular Matrix Pathology Section, National Cancer Institute, NIH, Bethesda (MD) USA.  
 1992: **Researcher**, scientific sector *06/A2-MED/04* General and Clinical Pathology (**06/A2, Patologia Generale**), School of Medicine, University “G. d’Annunzio”, Chieti.  
 1989-1992: **Postdoctoral Fogarty Fellow**, Laboratory of Pathology, Tumor Invasion and Metastasis Section, National Cancer Institute, NIH, Bethesda (MD) USA.  
 1987-1989: **PhD Student**, Department of Experimental Medicine, University “Sapienza”, Rome.

### Teaching activity (academic year 2020-2021)

- General Pathology and Pathophysiology*, School of Dietitian, University “G. D’Annunzio”, Chieti  
*Pathophysiology*, School of Physiotherapy, University “G. D’Annunzio”, Chieti  
*General Pathology and Pathophysiology*, School of Specialization in Human Nutrition, University “G. D’Annunzio”, Chieti  
*General Pathology and Pathophysiology*, School of Specialization in Emergency Medicine, University “G. D’Annunzio”, Chieti

### Grant Review Activities

- Association for International Cancer Research (AICR, UK)  
 American University of Beirut (AUB) Grants  
 EuroNanoMed - European Innovative Research & Technological Development Translational Projects in Nanomedicine (Veneto, Italy),  
 Ministry of Research, FIRB-Miur Grants, Italy  
 Ministry of Research, Futuro in Ricerca Grants, Italy  
 Ministry of Research PRIN-Miur Grants, Italy  
 Tuscany Institute of Tumors (ITT) Grants, Italy  
 Training & Career Development Board - Career Development Fellowship (UK),  
 The Wellcome Trust and Royal Society, Sir Henry Dale Fellowship (UK)  
 United States-Israel Binational Science Foundation,  
 Yorkshire Cancer Research Grant (UK)

### Editorial Board Member

- 2020-pres: *Cancers* (MDPI Publications) Section Editor  
 2019-pres: *Oncology Letters* (Spandidos Publications) Associate Editor  
 2018-pres: *Oncology Reports* (Spandidos Publications) Associate Editor  
 2014-pres: *Frontiers in Endocrinology*, Review Editor  
 2016-2019: *Journal of Experimental and Clinical Cancer Research*, Deputy Editor  
 2010/2012: *Journal of Cell Science and Therapy* (Open Access Journals), Associate Editor  
 2010/2012: *European Journal of Medical Research* (Biomed/Springer/Nature), Associate Editor  
 2000-2015: *Journal of Experimental and Clinical Cancer Research*, Staff Editor

- 2020: *Guest Editor, Special issue* “Recent avances in p53”, *Biomolecules* – MDPI

2020: *Guest Editor, Special issue* “Hypoxia and tumors”, Journal of Experimental & Clinical Cancer Research – BMC part of Springer Nature  
2021: *Guest Editor, Special issue* “Recent avances in p53 2.0”, Biomolecules – MDPI  
2021: *Guest Editor, Special issue* “The impact of CIVID-19 infection in cancer”, Cancers – MDPI

## **Principal Investigator of Research Grant**

2018: **Italian Ministry of Reaserch** (Miur-FFABR).  
2015-2019: **Italian Association for Cancer Research** (AIRC, IG16742): The regulation of HIPK2/p53 activity by hyperglycaemia and its impact on tumor cell response to drugs.  
2011-2014: **Italian Association for Cancer Research** (AIRC, IG11377): Role of HIPK2 and zinc in modifying molecular pathways to restrain tumor growth.  
2008-2011: **Italian Association for Cancer Research** (AIRC, IG1086): Role of HIPK2 in p53 regulation.  
2005-2007: **Italian Ministry of Reaserch PRIN-Miur** (n. 2005059700\_003): Mechanisms of apoptosis due to HIPK2/p53 activation in neuronal death.  
2004-2007: **Italian Association for Cancer Research** (AIRC, IG1390): Molecular mechanisms of the activation of the HIPK2/p53 pathway in cell response to antineoplastic treatments.  
2003-2005: **Italian Ministry of Reaserch PRIN-Miur (n. 2003062004\_004)**: P53 function during chemo- and radio-resistance: using of RNAi technology.  
1997-2019: **Annual Grant University** “G. D’Annunzio”, Chieti.

## **Scientific contributor in Operative Units of the following Research Grant**

2004-06: **Italian Ministry of Reaserch PRIN-Miur**: Gastric carcinogenesi and molecular mechanisms.  
2000-2002: **Italian Ministry of Health**: Mechanisms of chemoresistance in brain tumors.  
1999-2000: **Italian Ministry of Health**: TP53 role in glioblastoma growth.  
1998-2003: **Italian Association for Cancer Research AIRC-NUSUG** (New Unit Start Up Grant): Role of the p53 oncosuppressor in the differentiation of normal and tumor cells: dissection of molecular mechanisms.  
1998-2001: **Italian Ministry of Reaserch PRIN-Miur**: Role of BRCA1 and BRCA2 in breast cancer.  
1998-2000: **Italian Ministry of Reaserch**: Mesothelioma and immunotherapy.  
1996-1999: **Telethon Grant**: Wild-type p53 protein is involved in skeletal muscle differentiation: dissection of molecular mechanisms.

## **Scientific interests**

Scientific activity is focused on molecular mechanisms of tumor resistance to chemotherapy and on the mechanisms of regulation of the oncosuppressor p53 and of its apoptotic activator HIPK2.

## **LIST OF PUBLICATIONS**

**H Index** ISI Web of Science (WOS): **33**  
**Citations** ISI WoS: **6206**  
**IF 2019**: **522,416**

100. Romeo MA, Gilardini Montani MS, Benedetti R, Santarelli R, D'Orazi G and Cirone M. STAT3 and mutp53 engage a positive feedback loop involving HSP90 and the mevalonate pathway. **Frontiers Oncology**, *in press*, 2020
99. D'Orazi G, Garufi A, Cirone M. NRF2 interferes with HIPK2/p53 activity to impair solid tumors chemosensitivity. **IUBMB Life**, 2020 Jun 27.
98. Garufi A, Baldari S, Pettinari R, GilardiniMontani MS, D'Orazi V, Pistrutto G, Crispini E, Giorno E, Toietta G, Marchetti F, Cirone M, **D'Orazi G**. A ruthenium(II) curcumin compound modulates NRF2 expression balancing the cell death/survival outcome in both wild-type and mutant p53-carrying cancer cells. **J Exp Clin Cancer Res** 2020, 39:122
96. Gilardini Montani MS, Falcinelli L, Santarelli R, Granato M, Romeo MA, Cecere N, Gonnella R, **D'Orazi G**, Faggioni A, Cirone M. KSHV infection skews macrophage polarization towards M2-like/TAM and activates Ire1 alpha-XBP1 axis promoting the release of pro-tumorigenic cytokines and the up-regulation of PD-L1. **Br J Cancer** 2020 May 18.
97. Romeo MA, Gilardini Montani MS, Benedetti R, Garufi A, **D'Orazi G** and Cirone M. PBA preferentially impairs cell survival of glioblastomas carrying mutp53 by reducing its expression level, activating wtp53, downregulating the mevalonate kinase and dysregulating UPR. **Biomolecules** 2020; 10(4). pii: E586
96. Garufi A, Federici G, Gilardini Montani MS, Crispini A, Cirone M, **D'Orazi G**. Interplay between endoplasmic reticulum (ER) stress and autophagy by Zn(II)-curc induces mutant p53H273 degradation. **Biomolecules**, 2020, 10(3). pii: E392.
95. Bosco MC, **D'Orazi G**, Del Bufalo D. Targeting hypoxia in tumor: A new promising therapeutic strategy. **J Exp Clin Cancer Res** 2020;39(1):8.
94. Romeo MA, Gilardini Montani MS, Gaeta A, **D'Orazi G**, Faggioni A, Cirone M. HHV-6A infection dysregulates autophagy/UPR interplay increasing beta amyloid production and tau phosphorylation in astrocytoma cells as well as in primary neurons, possible molecular mechanism linking viral infection to Alzheimer's Disease. **Biochim Biophys Acta Mol Basis Dis.** 2020;1866:165647.
93. Granato M, Gilardini Montani MS, Zompetta C, Santarelli R, Gonnella R, Romeo MA, **D'Orazi G**, Faggioni A and Cirone M. Quercetin interrupts the positive feed-back loop between STAT3 and IL-6, promotes autophagy and reduces ROS preventing EBV-driven B cell immortalization. **Biomolecules** 2019 Sep 12;9(9). pii: E482.
92. Garufi A, Traversi G, Cirone M, **D'Orazi G**. HIPK2 role in the tumor-host interaction: impact on fibroblasts transdifferentiation CAF-like. **IUBMB Life** 2019 71:2055-2061.
91. Garufi A, Traversi G, Gilardini Montani MS, D'Orazi V, Pistrutto G, Cirone M, **D'Orazi G**. Reduced chemotherapeutic sensitivity in high glucose condition: implication of antioxidant response. **Oncotarget** 10(45):4691-4702, 2019.
90. Di Agostino S, Fontemaggi G, Strano S, Blandino G, **D'Orazi G**. Targeting mutant p53 in cancer: latest insight. **J Exp Clin Cancer Res** 5;38(1):290, 2019.
89. Cirone M, Gilardini Montani MS, Granato M, Garufi A, Faggioni A, **D'Orazi G**. Autophagy manipulation as a strategy for efficient anticancer therapies: possible consequences. **J Exp Clin Cancer Res** 38:262, 2019.
88. Gilardini Montani MS, Cecere N, Granato M, Romeo MA, Falcinelli L, Ciciarelli U, **D'Orazi G**, Faggioni A, Cirone M. Mutant p53, stabilized by its interplay with HSP90, activates a positive feed-back loop between NRF2 and p62 that induces chemo-resistance to Apigenin in pancreatic cancer cells. **Cancers (Basel)** 11:E703, 2019.
87. **D'Orazi G**, and Cirone M. Mutant p53 and cellular stress pathways: A criminal alliance that promotes cancer progression. **Cancers (Basel)** 11, 614; 2019.
86. Santarelli R, Carillo V, Romeo MA, Gaeta A, Nazzari C, Gonnella R, Granato M, **D'Orazi G**, Faggioni A, Cirone M. STAT3 phosphorylation affects p53/p21 axis and KSHV lytic cycle activation. **Virology** 5;528:137-143, 2019

85. Granato M, Gilardini Montani MS, Angiolillo C, **D'Orazi G**, Faggioni A, Cirone M. Cytotoxic drugs activate KSHV lytic cycle in latently infected PEL cells by inducing a moderate ROS increase controlled by HSF1, NRF2 and p62/SQSTM1. **Viruses** 11: 1-10, **2018**.
84. Spalletta S, Flati V, Toniato E, Di Gregorio J, Marino M, Pierdomenico L, Marchisio M, **D'Orazi G**, Cacciatore I, Robuffo I. Carvacrol reduces adipogenic differentiation by modulating autophagy and ChREBP expression. **PLoS ONE** 13:e0206894, **2018**.
83. Rotte A, **D'Orazi G**, Bhandaru M. Nobel committee honors tumor immunologists. **J Exp Clin Cancer Res** Oct 30;37:262, **2018**.
82. Granato M, Gilardini Montani MS, Santarelli R, **D'Orazi G**, Faggioni A, Cirone M. Apigenin, by activating p53 and inhibiting STAT3, modulates the balance between pro-apoptotic and pro-survival pathways to induce PEL cell death. **J Exp Clin Cancer Res.** **2017** Nov 28;36:167.
81. Granato M, Gilardini Montani MS, Romeo MA, Santarelli R, Gonnella R, D'Orazi G, Faggioni A, Cirone M. Metformin triggers apoptosis in PEL cells and alters bortezomib-induced Unfolded Protein Response increasing its cytotoxicity and inhibiting KSHV lytic cycle activation. **Cell Signal.** **2017**;40:239-247.
80. Masuelli L, Granato M, Benvenuto M, Mattera R, Bernardini R, Mattei M, d'Amati G, **D'Orazi G**, Faggioni A, Bei R, Cirone M. Chloroquine supplementation increases the cytotoxic effect of curcumin against Her2/neu overexpressing breast cancer cells in vitro and in vivo in nude mice while counteracts it in immune competent mice. **Oncoimmunology** 6:e1356151, **2017**.
79. Garufi A, Pistritto G, Baldari S, Toietta G, Cirone M, **D'Orazi G**. p53-dependent PUMA to DRAM antagonistic interplay as a key molecular switch in cell-fate decision in normal/high glucose conditions. **J Exp Clin Cancer Res** 36:126, **2017**.
78. Gonnella R, Yadav S, Gilardini Montani MS, Granato M, Santarelli R, Garufi A, **D'Orazi G**, Faggioni A, Cirone M. Oxidant species are involved in T/B-mediated ERK1/2 phosphorylation that activates p53-p21 axis to promote KSHV lytic cycle in PEL cells. **Free Radic Biol Med** 112:327-335, **2017**.
77. Gilardini Montani MS, Granato M, Santoni C, Del Porto P, Merendino N, **D'Orazi G**, Faggioni A, Cirone M. Histone deacetylase inhibitors VPA and TSA induce apoptosis and autophagy in pancreatic cancer cells. **Cellular Oncology** 40:167-80, **2017**.
76. Granato M, Rizzello C, Gilardini Montani MS, Cuomo L, Vitillo M, Santarelli R, Gonnella R, **D'Orazi G**, Faggioni A, Cirone M. Quercetin induces apoptosis and autophagy in Primary Effusion Lymphoma cells by inhibiting PI3K/AKT/mTOR and STAT3 signaling pathways. **J Nutr Biochem.** 41:124-136, **2017**
75. Baldari S, Garufi A, Granato M, Pistritto G, Cuomo L, Pistritto G, Cirone M, **D'Orazi G**. Hyperglycemia triggers HIPK2 protein degradation. **Oncotarget.** 8:1190-1203, **2017**.
74. Granato M, Rizzello C, Romeo MA, Yadav S, Santarelli R, **D'Orazi G**, Faggioni A, Cirone M. Concomitant reduction of c-Myc expression and PI3K/AKT/mTOR signaling by quercetin induces a strong cytotoxic effect against Burkitt's Lymphoma. **Int J Biochem Cell Biochem.** 79:393-400, **2016**.
73. Garufi A, Pistritto G, Cirone M, **D'Orazi G**. Reactivation of mutant p53 by capsaicin, the major constituent of peppers. **J Exp Clin Cancer Res.** 35:136, **2016**.
72. Garufi A, Trisciuglio D, Cirone M, **D'Orazi G**. ZnCl<sub>2</sub> sustains the adriamycin-induced cell death inhibited by high glucose. **Cell Death & Disease** 7:e2280, **2016**.
71. Cordani M, Pacchiana R, Butera G, **D'Orazi G**, Scarpa A, Donadelli M. Mutant p53 proteins alter cancer cell secretome and tumor microenvironment: involvement in cancer invasion and metastasis. **Cancer Letters** 376:303-309, **2016**.
70. Pistritto G, Trisciuglio D, Ceci C, Garufi A, **D'Orazi G**. Apoptosis as anticancer mechanism: function and dysfunction of its modulators and targeted therapeutic strategies. **Ageing-US** 8:603-619, **2016**.
69. Gilardini Montani MS, Granato M, Cuomo L, Valia S, Di Renzo L, **D'Orazi G**, Cirone M. High glucose and hyperglycemic sera from type 2 diabetic patients impair DC differentiation by

- inducing ROS and activating Wnt/beta-catenin and p38 MAPK. **Biochem Biophys Acta-Mol Basis DIS** 1862:805-813, **2016**.
68. Klionsky DJ\*, *et al.* Guidelines for the use and interpretation of assays for monitoring autophagy (2nd edition). **Autophagy** 12:1-222, **2016**.
  67. Garufi A, Ubertini V, Mancini F, D'Orazi V, Baldari S, Moretti F, Bossi G, **D'Orazi G**. The beneficial effect of Zinc(II) on low-dose chemotherapeutic sensitivity involves p53 activation in wild-type p53 cancer cells. **J Exp Clin Cancer Res.** 34:87, **2015**.
  66. Garufi A, D'Orazi V, Crispini A, **D'Orazi G**. Zn(II)-curc targets p53 in thyroid cancer cells. **Int J Oncol.** 47:1241-1248, **2015**
  65. Baldari S, Ubertini V, Garufi A, D'Orazi G, Bossi G. Targeting MKK3 as a novel anticancer strategy: molecular mechanisms and therapeutical implications. **Cell Death & Disease** 6:e1621, **2015**.
  64. Garufi A, **D'Orazi G**. High glucose dephosphorylates serine 46 and inhibits p53 apoptotic activity. **J Exp Clin Cancer Res.** 33:79, **2014**.
  63. Garufi A, D'Orazi V, Pucci D, Cirone M, Avantaggiati ML, **D'Orazi G**. Mutant p53H175 protein is targeted by Zn(II) compound for degradation through autophagy. **Cell Death & Disease** 5:e1271, **2014**
  62. Kolukula VK, Sahu G, Wellstein A, Rodriguez OC, Preet A, Iacobazzi V, **D'Orazi G**, Albanese C, Palmieri F, Avantaggiati ML. SLC25A1, or CIC, is a novel transcriptional target of mutant p53 and a negative tumor prognostic marker. **Oncotarget** 5:1212-25, **2014**.
  61. Garufi A, D'Orazi V, Arbiser JL, **D'Orazi G**. Gentian violet induces wtp53 in cancer cells. **Int J Oncology** 44(4):1084-90, **2014**.
  60. Gonnella R, Santarelli R, **D'Orazi G**, Faggioni A, Cirone M. Kaposi sarcoma-associated herpesvirus (KSHV) induces AKT hyperphosphorylation, bortezomib-resistance and GLUT-1 plasma membrane trafficking in THP-1 monocytic cell line. **J Exp Clin Cancer Res.** 32:79, **2013**.
  59. Garufi A, Trisciuglio D, Porru M, Leonetti C, Stoppacciaro A, D'Orazi V, Avantaggiati ML, Crispini A, Pucci D, **D'Orazi G**. A fluorescent curcumin-based Zn(II)-complex reactivates mutant (R175H and R273H) p53 in cancer cells. **J Exp Clin Cancer Res.** 32:72, **2013**.
  58. Cirone M, Garufi A, Di Renzo L, Granato M, Faggioni A, **D'Orazi G**. Zinc supplementation is required for the cytotoxic and immunogenic effects of chemotherapy in chemoresistant p53-functionally deficient cells. **Oncoimmunology** 2:e26198, **2013**.
  57. Granato M, Santarelli R, Lotti LV, Di Renzo L, Gonnella R, Garufi A, Trivedi P, Frati L, **D'Orazi G**, Faggioni A, Cirone M. JNK and macroautophagy activation by bortezomib has a pro-survival effect of in primary effusion lymphoma cells. **PLoS ONE** 8:e75965, **2013**.
  56. Granato M, Lacconi V, Peddis M, Lotti L, Di Renzo L, Gonnella R, Santarelli R, Trivedi P, Frati L, **D'Orazi G**, Faggioni A, Cirone M. HSP70 inhibition by 2-phenylethynylsulfonamide induces lysosomal cathepsin D release and immunogenic cell death in primary effusion lymphoma. **Cell Death & Disease** 4:e730, **2013**.
  55. Garufi A, Ricci A, Iorio E, Carpinelli G, Pistritto G, Cirone M, **D'Orazi G**. Glucose restriction induces cell death in parental but not in HIPK2 depleted RKO colon cancer cells: molecular mechanisms and implications for tumor therapy. **Cell Death & Disease** 4:e639, **2013**.
  54. Garufi A, Pistritto G, Ceci C, Di Renzo L, Santarelli R, Faggioni A, Cirone M, **D'Orazi G**. Targeting COX-2/PGE(2) pathway in HIPK2 knockdown cancer cells: impact on dendritic cell maturation. **PLoS One** 7:e48342, **2012**.
  53. **D'Orazi G**, Rinaldo C, Soddu S. Updates on HIPK2: a resourceful oncosuppressor for clearing cancer. **J Exp Clin Cancer Res** 31:63, **2012**.
  52. **D'Orazi G**, Givol D. p53 reactivation: The link to zinc. **Cell Cycle** 11, **2012**.
  51. Nodale C, Sheffer M, Jacob-Hirsch J, Folgiero V, Falcioni R, Aiello A, Garufi A, Rechavi G, Givol D, **D'Orazi G**. HIPK2 downregulates vimentin and inhibits breast cancer cell invasion. **Cancer Biology and Therapy** 13:1-7, **2012**.

50. Margalit O, Simon AJ, Yabukov E, Puca R, Yosepovich A, Avivi C, Jacob-Hirsch J, Gelernter I, Harmelin A, Barshack I, Rechavi G, **D'Orazi G**, Givol D, Amariglio N. Zinc supplement augments *in vivo* antitumor effect of chemotherapy by restoring p53 function. **Int J Cancer** 131: E562-8, **2012**.
49. Sheffer M, Simon AJ, Jacob-Hirsch J, Rechavi G, Domany E, Givol D, **D'Orazi G**. Genome-wide analysis discloses complete reversion of the hypoxia-induced transcription by zinc in colon cancer cells. **Oncotarget** 2: 1191-1202, **2011**.
48. Puca R, Nardinocchi L, Porru M, Simon AJ, Rechavi G, Leonetti C, Givol D, **D'Orazi G**. Restoring p53 active conformation by zinc increases the response of mutant p53 tumor cells to anticancer drugs. **Cell Cycle** 10:1679-89, **2011**.
47. Domenici F, Frasconi M, Mazzei M, **D'Orazi G**, Bizzarri AR and Cannistraro S. Azurin modulates the association of Mdm2 with p53: SPR evidence from interaction of the full-length proteins. **J Molecular Recogn.** 24:707-14, **2011**.
46. Nardinocchi L, Puca R, **D'Orazi G**. HIF-1 $\alpha$  antagonizes p53-mediated apoptosis by triggering HIPK2 degradation. **Ageing-US** (Albany NY) 3:33-43, **2011**.
45. Nardinocchi L, Pantisano P, Puca R, Porru M, Aiello A, Grasselli A, Leonetti C, Safran M, Rechavi G, Givol G, Farsetti A, **D'Orazi G**. Zinc downregulates HIF-1 $\alpha$  and inhibits its activity in tumor cells *in vitro* and *in vivo*. **PLoS ONE** 5:e15048, **2010**
44. Nardinocchi L, Puca R, Givol D, **D'Orazi G**. Counteracting MDM2-induced HIPK2 downregulation restores the HIPK2/p53 apoptotic signaling in cancer cells. **FEBS Lett** 584:4253-8, **2010**.
43. Stanga S, Lanni C, Govoni S, Uberti D, **D'Orazi G**, Racchi M. Unfolded p53 in the pathogenesis of Alzheimer's disease: is HIPK2 the link? **Ageing-US** (Albany NY) 2:545-54, **2010**
42. Puca R, Nardinocchi L, Givol D, **D'Orazi G**. Regulation of p53 activity by HIPK2: molecular mechanisms and therapeutical implications in human cancer cells. **Oncogene** 29:4378-87, **2010**.
41. Lanni C, Nardinocchi L, Puca R, Stanga S, Uberti D, Memo M, Govoni S, **D'Orazi G**, Racchi M. Homeodomain interacting protein kinase 2: a target for Alzheimer's beta amyloid leading to misfolded p53 and inappropriate cell survival. **PLoS One** 5:1-8, **2010**.
40. Nardinocchi L, Puca R, Givol D, **D'Orazi G**. HIPK2-A therapeutical target to be (re)activated for tumor suppression: Role in p53 activation and HIF-1 $\alpha$  inhibition., **Cell Cycle** 9:1-6, **2010**.
39. Puca R\*, Nardinocchi L, Starace G, Rechavi G, Sacchi A, Givol D, **D'Orazi G**. Nox1 is involved in p53 deacetylation and suppression of its transcriptional activity and apoptosis. **Free Rad Biol Med** 48:1338-1346, **2010**
38. Funari G, Domenici F, Nardinocchi L, Puca R, **D'Orazi G**, Bizzarri AR, Cannistraro S. Interaction of p53 with MDM2 and Azurin as studied by atomic force spectroscopy. **J Mol Recogn** 23:343-351, **2010**.
37. Puca R, Nardinocchi L, Sacchi A, Rechavi G, Givol D, **D'Orazi G**. HIPK2 modulates p53 activity towards pro-apoptotic transcription. **Mol Cancer** 8:85 **2009**.
36. Bon G, Di Carlo SE, Folgiero V, Avetrani P, Lazzari C, **D'Orazi G**, Brizzi MF, Sacchi A; Soddu S, Blandino G, Mottolesi M, Falcioni R. Negative regulation of beta(b) integrin transcription by homeodomain-interacting protein kinase e and p53 impairs tumor progression. **Cancer Res.** 69: 5978-5986, **2009**.
35. Nardinocchi L, Puca R, Sacchi A, Rechavi G, Givol D, **D'Orazi G**. Targeting hypoxia in cancer cells by restoring homeodomain interacting protein kinase 2 and p53 activity and suppressing HIF-1 $\alpha$ . **PLoS One** 4:e6819, **2009**.
34. Nardinocchi L., Puca R, Sacchi A, **D'Orazi G**. Inhibition of HIF-1 $\alpha$  activity by homeodomain-interacting protein kinase-2 correlates with sensitization of chemoresistant cells to undergo apoptosis. **Mol Cancer** 7:8 **2009**.
33. Puca R, Nardinocchi L, Bossi G, Sacchi A, Rechavi G, Givol D, **D'Orazi G**. Restoring wtp53 activity in HIPK2 depleted MCF7 cells by modulating metallothionein and zinc. **Exp Cell Res.** 315:67-75, **2009**.

32. Nardinocchi L, Puca R, Guidolin D, Belloni AS, Bossi G, Michiels C, Sacchi A, Onisto M, **D’Orazi G**. Transcriptional regulation of hypoxia-inducible factor 1alpha by HIPK2 suggests a novel mechanism to restrain tumor growth. **Biochem Biophys Acta MCR** 1793:368-377, **2009**.
31. Puca R, Nardinocchi L, **D’Orazi G**. Regulation of vascular endothelial growth factor expression by homeodomain-interacting protein kinase-2. **J Exp Clin Cancer Res**. 27:22, **2008**.
30. Puca R, Nardinocchi L, Gal H, Rechavi G, Amariglio N, Domany E, Notterman DA, Scarsella M, Leonetti C, Sacchi A, Blandino G, Givol D, **D’Orazi G**. Reversible dysfunction of wild-type p53 following homeodomain-interacting protein kinase-2 knockdown. **Cancer Res** 15:3707-3714, **2008**
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