

Marcos Malumbres, PhD

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Education

1993 Ph.D., University of León, León, Spain
1987 B.S., University of Navarra, Pamplona

Research and Professional Experience

2005- Head, Cell Division & Cancer Group (CNIO)
2004- Staff Investigator, Spanish National Council of Research (CSIC), Spain
1999-2004 Staff Scientist, CNIO, Madrid. (Mariano Barbacid, Supervisor)
1995-1998 Assistant Research Scientist, New York University Medical Center, New York,
USA, (Angel Pellicer, Supervisor)
1993-1994 Postdoctoral Fellow, New York University Medical Center, New York,
USA, (Angel Pellicer, Supervisor)
1988-1988 Visiting Scientist, Zentrum für Molekulare Biologie im Heidelberg
(Hermann Bujard, Supervisor)
1988-1993 Graduate Fellow, Dep. of Microbiology, Univ. of León, León, Spain
(Juan F. Martín, Supervisor)

Awards and Honors

2007-2008 Council Member, European Association for Cancer Research
2007- Honorary member, Balkan Union of Oncology
2005 SEBBM Beckman/Coulter Award 2005
2001- Honorary Professor, Univ. Autónoma de Madrid
1994 "Juan Abelló" Prize of the Real Academia de Doctores

Professional Society Memberships and Committees

2010-	American Society of Microbiology
2009-	ISCI Animal Committee
2006-2008	CNIO Animal Committee
2001-	European Association for Cancer Research
1998-	Spanish Society of Biochemistry and Molecular Biology (SEBBM)

Teaching and Administrative Responsibilities

Post-graduate and doctoral courses: Universidad Autónoma de Madrid, Universidad Complutense de Madrid, Univ. Del País Vasco (Bilbao), Gulbenkian Institute (Portugal), etc.

Peer-Review Activities

Editorial Boards

2007-	<i>J. BUON</i>
2008-	<i>Current Medical Chemistry</i>
2010-	<i>Molecular Cancer</i> , Associate Editor
2010-	<i>Genes & Cancer</i> , Editorial Board founding member, 2010
2011-	<i>Frontiers in Molecular and Cellular Oncology</i> , Associate Editor
2011-	<i>microRNA</i> , Editorial Board founding member,

Journal Peer-Review

Science, *Nature Reviews series* (*Nat. Rev. Cancer*, *Nat. Rev. Mol. Cell Biol.*, *Nat. Rev. Drug Discover*), *Nat. Med.*, *Nat. Cell Biol.*, *Nat. Communications*, *Nat. Struc. Biol.*, *Mol. Syst. Biol.*, *Trends series*, *Cancer Cell*, *PLoS Biol.*, *EMBO J.*, *EMBO Reports*, *EMBO Mol. Med.*, *J. Clin. Invest.*, *PNAS*, *J. Nat. Cancer Inst.*, *J. Cell Biol.*, *Mol. Biol. Cell*, *Mol. Cell. Biol.*, *Cancer Res.*, *Oncogene*, *Nucleic Acids Res.*, *Carcinogenesis*, *Cell Cycle*, *FEBS Letters*, *Bioessays* and others.

Grant Review

Ad hoc reviewer for EU 7FP, Cancer Research UK, The Wellcome Trust, Association for International Cancer Research. Dutch Cancer Society, Research Grants Council (Hong Kong), INCA (France) and Spanish National (MICINN, FIS, AECC) and Regional (Cataluña, Junta Andalucía, Xunta Galicia, etc.) Institutions. Staff member of the Spanish Agency of Evaluation of Research Projects (ANEP; since 2012).

Grant Committees

Spanish Ministry of Innovation and Research (MICINN, 2001-2011), Ministry of Health (FIS 2006-2010), EU 7FP (2008), AECC (2007), Staff Spanish National Agency for Project Evaluation (ANEP; 2012-).

International Conferences Organized

CNIO Cancer Conference *The Cell Cycle and Cancer*, Centro Nacional de Investigaciones Oncológicas, Madrid, 2002 (co-organizers: Jiri Bartek, Charles J. Sherr)

Workshop on Mouse Models in Cancer, Barcelona, 2004.b(co-organizer)
Cell Cycle and Cancer Meeting, Toulouse, March 2008 (organizing Committee).
Cell Cycle Regulators/Inhibitors & Cancer, Vienna, February 2011 (organizing Committee).
Aneuploidy and Chromosomal Instability and Cancer. CNIO, Madrid, 2013 (co-organizer)

Invited Conferences

(Representative conferences in the last 5 years)

2008 Cell Cycle and Cancer Meeting, Toulouse, France
 2008 MRC Research Centre, Cambridge, UK
 2008 10th European Congress of Endocrinology, Berlin, Germany
 2008 MRC Clinical Sciences Center, London, UK
 2009 Institute for Molecular Pathology, Vienna, Austria
 2009 Baylor College of Medicine, Houston, USA
 2009 AACR Annual Meeting, Denver, USA
 2009 The First EMBO Meeting, Amsterdam, The Netherlands
 2009 IRBB, ICC, Barcelona, Spain
 2009 Gulbenkian Institute, Oeiras, Lisbon
 2010 Centre de Recherche en Biochemie Macromoléculaire, Montpellier
 2010 Chromosome segregation and Aneuploidy Symposium, IBMC, Porto, Lisbon
 2011 Cell Cycle Inhibitors and Cancer Workshop, Vienna
 2011 The Institute for Cancer Research, London
 2011 Univ. Of Lisboa, Lisbon
 2011 Cell Signaling Networks, Merida, México
 2011 Inproteolysis 2011, Valencia
 2011 Univ. P. Sabatier, Toulouse
 2011 Nordisk Mitotic Network, Copenhagen
 2012 Cancer Research Center (CIC) Salamanca
 2012 Institute for Research in Immunology and Cancer (IRIC), Université de Montréal
 2012 Jacques-Monod Conference of the Cell Cycle, Roscoff, 2012
 2012 EMBO Workshop on Early Mouse Development, Cambridge, UK
 2012 EMBL Monterotondo, Italy
 2012 56th Nat. Meeting of the Italian Society of Biochemistry and Molecular Biology, Chieti
 2013 EMBO Workshop, Cell Death in Mitosis meeting, Obergurgl, Austria
 2013 AACR Annual Meeting, Washington

Patents

Bueno, M.J., Pérez de Castro, I., Fernández-Piqueras, J., Malumbres, M. (2008) Use of microRNA-203 for the manufacture of a medicament for treating cancer in humans and for

reducing V-abl Abelson murine leukemia viral oncogene homolog 1 (ABL1) and B cell receptor (BCR)-ABL1 expression and tumor cell proliferation.

Patent Number(s): WO2009112625-A1; ES2325726-A1; ES2325726-B1

Alvarez, C., Diéguez, C., García-Lavandeira, M., Malumbres, M. (2008) Isolation of multipotent hypophysary cells and in vitro differentiation thereof.

Pub. No.: WO/2010/061030. International Application No.: PCT/ES2009/070530

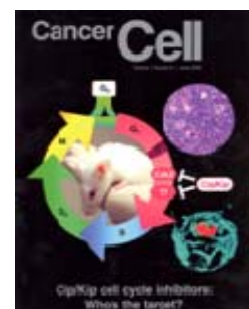
Publications

1. Malumbres, M., Mateos, L.M., Guerrero, C. and Martín, J.F. (1988) Nucleotide sequence of the threonine synthase (*thrC*) gene of *Brevibacterium lactofermentum*. *Nucleic Acids Res.* **16**, 9859. [PMID: 3186450]
2. Martín, J.F., Cadenas, R.F., Malumbres, M., Mateos, L.M., Guerrero, C. and Gil, J.A. (1990) Construction and utilization of promoter-probe and expression vectors in corynebacteria. Characterization of corynebacterial promoters. In: *Genetics of Industrial Microorganisms '90*. Heslot, H., Davies, J., Florent, J., Bobichon, L., Durant, G., Penasse, L., eds. Société Française de Microbiologie, Strasbourg, pp. 283-292.
3. Martín, J.F., Mateos, L.M., Cadenas, R.F., Guerrero, C., Malumbres, M., Colina, A. and Gil, J.A. (1990) Molecular genetics of corynebacteria: cloning and characterization of the tryptophan operon and the genes of the threonine biosynthetic pathway. In: *Microbiology Applications in Food Biotechnology*. Nga, B.H., Lee, Y.K., eds. Elsevier, London, pp. 20-26.
4. Guerrero, C., Mateos, L.M., Malumbres, M. and Martín, J.F. (1992) The bleomycin resistance gene from Tn5 is an excellent marker for transformation of corynebacteria. *Appl. Microbiol. Biotechnol.* **36**, 759-762. [PMID: 1373065]
5. Pisabarro, A., Malumbres, M., Mateos, L.M., Oguiza, J.A. and Martín, J.F. (1993) A cluster of three genes, *dapA*, *or2*, and *dapB*, of *Brevibacterium lactofermentum* encodes dihydrodipicolinate synthase, dihydrodipicolinate reductase and a third polypeptide of unknown function. *J. Bacteriol.* **175**, 2743-2749. [PMID: 8478336]
6. Malumbres, L. and Malumbres, M. (1993) Promoter structure recognition in corynebacterial DNA sequences by artificial neural networks. In: *Industrial & Cognitive Applications of Neural Networks*. EC2 Publishing, Nanterre, pp. 155-164.
7. Coque, J.J.R., Malumbres, M., Martín, J.F. and Liras, P. (1993) Analysis of the codon usage of the cephamycin C producer *Nocardia lactamdurans*. *FEMS Microbiol. Lett.* **110**, 91-96.
8. Oguiza, J.A., Malumbres, M., Eriani, G., Pisabarro, A., Mateos, L.M., Gangloff, J. and Martín, J.F. (1993) A gene encoding arginyl-tRNA synthetase is located in the upstream region of the *lysA* gene in *Brevibacterium lactofermentum*. Regulation of the *argS-lysA* cluster expression by arginine. *J. Bacteriol.* **175**, 7356-7362. [PMID: 8226683]
9. Malumbres, M., Gil, J.A. and Martín, J.F. (1993) Codon preference in corynebacteria. *Gene* **134**, 15-24. [PMID: 8244028]
10. Guerrero, C., Mateos, L.M., Malumbres, M. and Martín, J.F. (1994) Directed mutagenesis of a regulatory palindromic sequence upstream from the *Brevibacterium lactofermentum* tryptophan operon. *Gene* **138**, 35-41. [PMID: 7510262]

11. Malumbres, M., Mateos, L.M., Lumbreras, M.A., Guerrero, C. and Martín, J.F. (1994) Analysis and expression of the *thrC* gene of *Brevibacterium lactofermentum* and characterization of the encoded threonine synthase. *Appl. Environ. Microbiol.* **60**, 2209-2219. [PMID: 8074505]
12. Mateos, L.M., Pisabarro, A., Pátek, M., Malumbres, M., Guerrero, C., Eikmanns, B.J., Sahm, H. and Martín, J.F. (1994) Transcriptional analysis and regulatory signals of the *hom-thrB* cluster of *Brevibacterium lactofermentum*. *J. Bacteriol.* **176**, 7362-7371. [PMID: 7961509]
13. Malumbres, M., Mateos, L.M. and Martín, J.F. (1995) Microorganisms for amino acid production: *Escherichia coli* and corynebacteria. In: *Food Biotechnology: Microorganisms*. Hui, Y.H., Khachatourians, G.G., eds. VCH Publishers, Inc, pp. 423-469.
14. Malumbres, M., Mateos, L.M., Guerrero, C. and Martín, J.F. (1995) Molecular cloning of the *hom-thrC-thrB* cluster from *Bacillus* sp. ULM1: Expression of the *thrC* gene in *Escherichia coli* and corynebacteria, and evolutionary relationships of the threonine genes. *Folia Microbiol.* **40**, 595-606. [PMID: 8768250]
15. Oguiza, J.A., Marcos, A.T., Malumbres, M. and Martín, J.F. (1996) Multiple sigma factor genes in *Brevibacterium lactofermentum*: characterization of *sigA* and *sigB*. *J. Bacteriol.* **178**, 550-553. [PMID: 8550480]
16. Malumbres, M. and Martín, J.F. (1996) Molecular control mechanisms of lysine and threonine biosynthesis in amino acid-producing corynebacteria: Redirecting carbon flow. *FEMS Microbiol. Lett.* **143**, 103-114. [PMID: 8837462]
17. Oguiza, J.A., Marcos, A.T., Malumbres, M. and Martín, J.F. (1996) Sequence and transcriptional analysis of the *galE* gene encoding the UDP-galactosidase of *Brevibacterium lactofermentum*. *Gene* **177**, 103-107. [PMID: 8921853]
18. Malumbres, M., Pérez de Castro, I., Santos, J., Meléndez, B., Manges, R., Serrano, M., Pellicer, A. and Fernández-Piqueras, J. (1997) Inactivation of the cyclin-dependent kinase inhibitor p15^{INK4b} by deletion and *de novo* methylation with independence of p16^{INK4a} alterations in murine primary T-cell lymphomas. *Oncogene* **14**, 1361-1370. [PMID: 9178896]
19. Malumbres, M., Manges, R., Ferrer, N., Lu, S. and Pellicer, A. (1997) Isolation of high molecular weight DNA for reliable genotyping of transgenic mice. *BioTechniques* **22**, 1114-1119. [PMID: 9187761]
20. Malumbres, M., Perez de Castro, I., Santos, J., Perez-Olle, R., Fernandez-Piqueras, J. and Pellicer, A. (1998) An AC-repeat adjacent to mouse Cdkn2B allows the detection of specific allelic losses in the p15^{INK4b} and p16^{INK4a} tumor suppressor genes. *Mamm. Genome* **9**, 183-185. [PMID: 9501299]
21. Manges, R., Corral, T., Kohl, N.E., Symmans, W.F., Lu, S., Malumbres, M., Gibbs, J.B., Oliff, A. and Pellicer, A. (1998) Antitumor effect of a farnesyl-protein transferase inhibitor in mammary and lymphoid tumors overexpressing N-ras in transgenic mice. *Cancer Res.* **15**, 1253-1259. [PMID: 9515813]
22. Malumbres, M. and Pellicer, A. (1998) Ras pathways to cell cycle control and cell transformation. *Front. Biosci.* **3**, d887-912. [PMID: 9696882]
23. Malumbres, M., Pérez de Castro, I., Santos, J., Fernández-Piqueras, J. and Pellicer, A. (1999) Hypermethylation of the cell cycle inhibitor p15^{INK4b} 3'-untranslated region interferes with its transcriptional regulation in primary lymphomas. *Oncogene* **18**, 385-396. [PMID: 9927195]
24. Malumbres, M. and Pellicer, A. (1999) Ras signaling in cell cycle regulation and its role in tumor development. *Rev. Oncologia* **1**, 66-76.

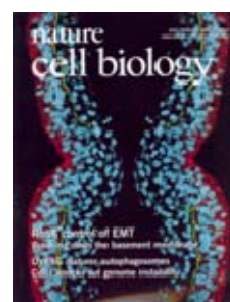
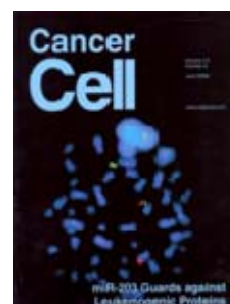
25. Pérez de Castro, I., Malumbres, M., Santos, J., Pellicer, A. and Fernández-Piqueras, J. (1999) Cooperative alterations of Rb-pathway regulators in mouse primary T-cell lymphomas. *Carcinogenesis* 20, 1675-1682. [PMID: 10469610]
26. García-España, A., Biria, S., Malumbres, M., Levin, B., Meruelo, D. and Pellicer, A. (1999) Targeted gene transfer system using a streptavidine-transforming growth factor- α chimeric protein. *DNA Cell Biol.* 18, 743-749. [PMID: 10541433]
27. Pellicer, A. and Malumbres, M. (2000) Bases moleculares de la transformación neoplásica. In: *Líicones de Patología Molecular*, González-Sastre, F. and Guinovart, J.J., eds. Springer-Verlag, Heidelberg, Barcelona.
28. Meléndez, B.*, Malumbres, M.*, Pérez de Castro, I., Santos, J., Pellicer, A. and Fernández-Piqueras, J. (2000) Characterization of the murine p19^{ARF} promoter CpG island and its methylation pattern in primary lymphomas. *Carcinogenesis* 21, 817-821. [PMID: 10753221]
29. Malumbres, M., Pérez de Castro, I., Hernández, M.I., Jiménez, M., Corral, M.T. and Pellicer, A. (2000) Cellular response to oncogenic Ras involves induction of the Cdk4 and Cdk6 inhibitor p15^{INK4b}. *Mol. Cell. Biol.*, 20, 2915-2925. [PMID: 10733595]
30. Hernández-Muñoz, M.I., Malumbres, M., Leonardi, P. and Pellicer, A. (2000) The Rgr oncogene (homologous to RalGDS) induces transformation and gene expression by activating Ras, Ral and Rho mediated pathways. *Oncogene*, 19, 2745-2757. [PMID: 10851075]
31. Latres, E., Malumbres, M., Sotillo, R., Martín, J., Ortega, S., Martín-Caballero, J., Flores, J.M., Cordon-Cardo, C. and Barbacid, M. (2000) Limited overlapping roles of P15^{INK4b} and P18^{INK4c} cell cycle inhibitors in proliferation and tumorigenesis. *EMBO J.*, 19, 3496-3506.
32. Malumbres, M., Ortega, S. and Barbacid, M. (2000) Genetic analysis of cyclin-dependent kinases and their inhibitors. *Biol. Chem.*, 381, 827-838.
33. Esteban, L.M., Vicario-Abejon, C., Fernandez-Salguero, P., Fernandez-Medarde, A., Swaminathan, N., Yienger, K., Lopez, E., Malumbres, M., McKay, R., Ward, J.M., Pellicer, A., Santos, E. (2001) Targeted genomic disruption of H-ras and N-ras, individually or in combination, reveals the dispensability of both loci for mouse growth and development. *Mol. Cell. Biol.* 21, 1444-1452.
34. Sotillo, S., Dubus, P., Martín, J., de la Cueva, E., Ortega, S., Malumbres, M. and Barbacid, M. (2001) Wide spectrum of tumors in knock in mice carrying a Cdk4 protein insensitive to INK4 inhibitors. *EMBO J.* 20, 6637-6647.
35. Sotillo, R., García, J. F., Ortega, S., Martín, J., Dubus, P., Barbacid, M. and Malumbres M. (2001) Invasive melanoma in Cdk4 targeted mice. *Proc. Natl. Acad. Sci. USA* 98, 13312-13317.
36. Malumbres, M. and Barbacid, M. (2001) To cycle or not to cycle: a critical decision in cancer. *Nature Reviews Cancer* 1, 222-231.
37. Ortega, S., Malumbres, M. and Barbacid, M. (2002) Cdk4 and their INK4 inhibitors in tumor biology. *Biochim. Biophys. Acta* 87513, 1-15.
38. Diaz, R., Ahn, D., Lopez-Barcons, L., Malumbres, M., Pérez de Castro, I., Lue, J., Ferrer, N., Mangués, R., Tsong, J., García, R., Pérez-Soler, R. and Pellicer, A. (2002) The N-ras protooncogene can suppress the malignant phenotype in the presence or absence of its oncogene. *Cancer Res.* 62, 4514-4518.
39. Ortega, S., Malumbres, M. and Barbacid, M. (2002) Cell cycle and Cancer: The G1 restriction point and the G1/S transition. *Curr. Genomics* 3, 245-263.

40. Malumbres, M. and Carnero, A. (2003) Cell cycle deregulation: a common motif in cancer. *Progress Cell Cycle Res.* 5, 5-18.
41. Pérez de Castro, I., Diaz, R., Malumbres, M., Hernández, M.I., Jagirdar, J., Jiménez, M., Ahn, D. and Pellicer A. (2003) Mice deficient for N-ras: Impaired antiviral immune response and T-cell function. *Cancer Res.* 63, 1615-1622.
42. Malumbres, M. and Barbacid, M. (2003) *RAS* oncogenes: the first 30 years. *Nature Rev. Cancer* 3, 459-465.
43. Malumbres, M., Hunt, S.L., Sotillo, R., Martín, J., Odajima, J., Martín, A., Dubus, P., Ortega, S., Barbacid, M. (2003) Driving the cell cycle to cancer. *Adv. Exp. Med. Biol.* 532, 1-11.
44. Martín, J., Hunt, S.L., Dubus, P., Sotillo, R., Néhmé-Pélluard, F., Magnuson, M.A., Parlow, A.F., Malumbres, M., Ortega, S. and Barbacid, M. (2003) Genetic rescue of *Cdk4 null* mice restores pancreatic β -cell proliferation but not homeostatic cell number. *Oncogene* 22, 5261-5269.
45. Ortega, S., Prieto I., Odajima, J., Martín, A., Dubus, P., Sotillo, R., Barbero J.L., Malumbres, M. and Barbacid, M. (2003) Cyclin dependent kinase 2 is essential for meiosis but not for mitotic cell division in mice. *Nature Genet.* 35, 25-31.
46. Wolff, L., Garin, M.T., Koller, R., Bies, J., Liao, W., Malumbres, M., Tessarollo, L., Powell, D. and Perella, C. (2003) Hypermethylation of the *Ink4b* Locus in Murine Myeloid Leukemia and Increased Susceptibility to Leukemia in *p15^{Ink4b}*-deficient Mice. *Oncogene* 22, 9265-9274.
47. Malumbres, M.*, Sotillo, R., Santamaría, D., Galán, J., Cerezo, A., Ortega, S., Dubus, P. and Barbacid, M.* (2004) Mammalian cells cycle without the D-type cyclin-dependent kinases *Cdk4* and *Cdk6*. *Cell* 118, 493-504. [*Co-corresponding authors]
News & Views: Murray, A.W. (2004) Recycling the cell cycle: cyclins revisited. *Cell* 116, 221-234. Cycling without cyclins. *The Scientist*, August 20, 2004.
48. Auwerx J., Avner, P., Baldock, R., Ballabio, A., Balling, R., Barbacid, M., Berns, A., Bradley, A., Brown, S., Carmeliet, P., Chambon, P., Cox, R., Davidson, D., Davies, K., Duboule, D., Forejt, J., Granucci, F., Hastie, N., Hrabé de Angelis, M., Jackson, I., Kioussis, D., Kollias, K., Lathrop, M., Lendahl, U., Malumbres, M., Melchner, H. von, Müller, W., Partanen, J., Ricciardi-Castagnoli, P., Rigby, P., Rosen, B., Rosenthal, N., Skarnes, B., Stewart, A.F., Thornton, J., Tocchini-Valentini, G., Wagner, E., Wahli, W. and Wurst, W. (2004) The European dimension for the mouse genome mutagenesis program. *Nat. Genet.* 36, 925-927.
49. Malumbres, M. (2005) Revisiting the "Cdk-centric" view of the mammalian cell cycle. *Cell Cycle* 4, 206-210.
50. Pérez de Castro, I., Benet, M., Jiménez, M., Alzabin, S., Malumbres, M. and Pellicer, A. (2005) Mouse *p10*, an alternative spliced form of *p15^{Ink4b}*, inhibits cell cycle progression and malignant transformation. *Cancer Res.*, 65, 3249-3256.
51. Sotillo, R., Renner, O., Dubus, P., Ruiz-Cabello, J., Martín-Caballero, J., Barbacid, M., Carnero, A. and Malumbres, M. (2005) Cooperation Between *Cdk4* and *p27^{Kip1}* in Tumor Development: a Preclinical Model to Evaluate Cell Cycle Inhibitors with Therapeutic Activity. *Cancer Res.*, 65, 3846-3852.
52. Martín, A., Odajima, J., Hunt, S.L., Dubus, P., Ortega, S., Malumbres, M.* and Barbacid, M.* (2005) Cell Cycle Inhibition and Tumor Suppression by *p21^{Cip1}* and *p27^{Kip1}* are Independent of *Cdk2*. *Cancer Cell* 7, 591-598. [*Co-corresponding authors]

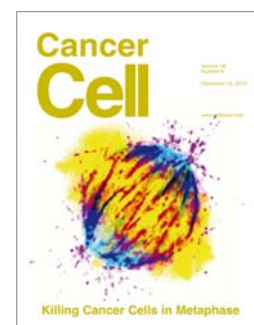


53. Abella, A., Dubus, P., Malumbres, M., Rane, S.G., Kiyokawa, H., Sicard, A., Vignon, F., Langin, D., Barbacid, M. and Fajas, L. (2005) Cdk4 promotes adipogenesis through PPAR γ activation. *Cell Metabolism* 2, 239-249.
54. Malumbres, M. and Barbacid, M. (2005) Mammalian cyclin-dependent kinases. *Trends Biochem. Sci.*, 30, 630-641.
55. Barbacid, M., Ortega, S., Sotillo, R., Odajima, J., Martín, A., Santamaría, D., Dubus, P. and Malumbres, M. (2005) Cell cycle and cancer: genetic analysis of the role of cyclin-dependent kinases. *Cold Spring Harb. Symp. Quant. Biol.* 70, 233-240.
56. Steitz, J., Büchs, S., Tormo, D., Ferrer, A., Wenzel, J., Huber, C., Wölfel, T., Barbacid, M., Malumbres, M. and Tüting, T. (2006) Evaluation of genetic melanoma vaccines in cdk4-mutant mice provides evidence for immunological tolerance against autochthonous melanomas in the skin. *Int. J. Cancer* 118, 373-380.
57. Duensing, A., Liu, Y., Tseng, M., Malumbres, M., Barbacid, M. and Duesing, S. (2006) Cyclin-dependent kinase 2 is dispensable for normal centrosome duplication but required for oncogene-induced centrosome overduplication. *Oncogene* 25, 2943-2949.
58. Malumbres, M., Dubus, P. and Ortega, S. (2006) Mouse models to study the *in vivo* function of Cyclin-dependent kinases in normal homeostasis and tumor development. *In: Inhibitors of cyclin-dependent kinases as anti-tumor agents* (Smith, P.J. and Yue, E.W., eds.) CRC Press, Boca Raton. pp. 55-83.
59. Malumbres, M. and Barbacid, M. (2006) Is Cyclin D1/Cdk4 kinase a bona-fide cancer target? *Cancer Cell* 9, 2-4.
60. Hacker, E., Muller, H.K., Irwin, N., Gabrielli, B., Lincoln, D., Pavey, S., Powell, M.B., Malumbres, M., Barbacid, M., Hayward, N. and Walker, G. (2006) Spontaneous and UV radiation-induced multiple metastatic melanomas in *Cdk4^{R24C/R24C}/TP53* mice. *Cancer Res.* 66, 2946-2952.
61. Malumbres, M. (2006) Therapeutic opportunities to control tumor cell cycles. *Clin. Transl. Oncol.* 8, 399-408.
62. Tormo, D., Ferrer, A., Gaffal, E., Wenzel, J., Basner-Tschakarjan, E., Steitz, J., Heukamp, L.C., Gutgemann, I., Buettner, R., Malumbres, M., Barbacid, M., Merlino, G., Tüting, T. (2006). Rapid Growth of Invasive Metastatic Melanoma in Carcinogen-Treated Hepatocyte Growth Factor/Scatter Factor-Transgenic Mice Carrying an Oncogenic CDK4 Mutation. *Am. J. Pathol.* 169, 665-672.
63. Blazquez, C., Carracedo, A., Barrado, L., Real, P.J., Fernández-Luna, J.L., Velasco, G., Malumbres, M. and Guzman, M. (2006) Cannabinoid receptors as novel targets for the treatment of melanoma. *FASEB J.* 20, 2633-2635.
64. Malumbres, M. (2006) Preclinical models for cell cycle-targeted therapies. *Adv. Exp. Med. Biol.* 587, 139-147.
65. Malumbres, M. and Barbacid, M. (2007) Cell cycle kinases in cancer. *Curr. Opin. Genet. Dev.* 17, 60-65.
66. Pérez de Castro, I., de Cárcer, G. and Malumbres, M. (2007) A census of mitotic cancer genes. New insights into tumor cell biology and cancer therapy. *Carcinogenesis* 28, 899-912.
67. de Cárcer, G.; Pérez de Castro, I. and Malumbres, M. (2007) Targeting cell cycle kinases for cancer therapy. *Curr. Med. Chem.* 14, 969-985.
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