Publications

Palmer, N., Talib, S.Z.A., Ratnacaram, C.K., Low, D., Bisteau, X., Lee, J.H.S., Pfeiffenberger, E., Wollmann, H., Tan, J.H.L., Wee, S., Sobota, R., Gunaratne, J., Messerschmidt, D., Guccione, E.*, and Kaldis, P.* (2019)
CDK2 regulates the NRF1/Ehmt1 axis during meiotic prophase I.
J. Cell Biol., *218*, in press, doi: 10.1083/jcb.201903125

Tapia, V.S., Daniels, M.J.D., Palazón-Riquelme, P., Dewhurst, M., Luheshi, N.M., Rivers-Auty, J., Green, J., Redondo-Castro, E., Kaldis, P., Lopez-Castejon, G.*, Brough, D.* (2019)
The related cytokines IL-1β, IL-18, and IL-1α share related but distinct secretory routes.
J. Biol. Chem., *294*, 8325-8335.

Szmyd, R., Niska-Blakie, J., Diril, M.K., Renck Nunes, P., Tzelepis, K, Lacroix, A., Van Hul, N., Mato, J., Dreesen, O., Bisteau, X., and Kaldis, P.* (2019)
Premature activation of Cdk1 leads to mitotic events in S phase and embryonic lethality.
Oncogene, *38*, 998-1018.

Caldez, M.J., Van Hul, N., Koh, H.W.L., Teo, X.Q., Fan, J.J., Tan, P.Y., Dewhurst, M.R., Too, P.G., Talib, S.Z.A., Chiang, B.E., Stünkel, W., Yu, H., Lee, P., Fuhrer, T., Choi, H., Björklund, M., and Kaldis, P.* (2018)
Metabolic remodeling during liver regeneration.
Developmental Cell, *47*, 425-438.

Takahashi, A., Mulati, M., Saito, M., Numata, H., Kobayashi, Y., Ochi, H., Sato, S., Kaldis, P., Okawa, A., and Inose, H.* (2018)
Loss of cyclin-dependent kinase 1 impairs bone formation, but does not affect the bone anabolic effects of parathyroid hormone.
J. Biol. Chem., *293*, 19387-19399.

Dai, L., Zhao, T., Bisteau, X., Sun, W., Prabhu, N., Lim, Y.T., Sobota, R., Kaldis, P., Nordlund, P.* (2018)
Modulation of protein-interaction states through the cell cycle,
Cell, *173*, 1481-1494.

Tan, C.S.H., Go, K.D., Bisteau, X., Dai, L., Yong, C.H., Prabhu, N., Ozturk, M.B., Lim, Y.T., Sreekumar, L., Lengqvist, J., Tergaonkar, V., Kaldis, P., Sobota, R.M., Nordlund, P.* (2018)
Thermal proximity coaggregation for system-wide profiling of protein complex dynamics in

cells.
Science, *359*, 1170-1177.

Wang, L., Tu, Z., Liu, C., Liu, H., Kaldis, P., Chen, Z., and Li, W.* (2018)
Dual roles of TRF1 in tethering telomeres to the nuclear envelope and protecting them from fusion during meiosis.
Cell Death Differentiation, *25*, 1174-1188.

Marlier, Q., Jibassia, F., Verteneuil, S., Linden, J., Kaldis, P., Meijer, L., Nguyen, L., Vandenbosch, R., and Malgrange, B.* (2018) Genetic and pharmacological inhibition of Cdk1 provides neuroprotection towards ischemic neuronal death.
Cell Death Discovery, *4*, 43. doi: 10.1038/s41420-018-0044-7

Windpassinger, C., Piard, J., Bonnard, C., Alfadhel, M., Lim, S., Bisteau, X., Blouin, S., Ali, N.A.B., Ng, A.Y.U., Lu, H.,Tohari, S., Talib, S.Z.T., Van Hul, N., Caldez, M.J., Van Maldergem, L., Yigit, G., Kayserili, H., Youssef, S.A., Coppola, V., de Bruin, A., Tessarollo, L., Choi, H., Rupp, V., Rötzer, K., Roschger, P., Klaushofer, K., Altmüller, J., Roy, S., Venkatesh, B., Ganger, R., Grill, F., Chehida, F.B., Wollnik, B., Altunoglu, U., Al Kaissi, A., Reversade, B., and Kaldis, P. (2017)
CDK10 mutations in humans and mice cause severe growth retardation, spine malfomations and developmental delays.
Am. J. Hum. Genet., *101*, 391-403.

Miettinen, T.P., Caldez, M.J., Kaldis, P., and Björklund, M. (2017)
Cell size control - a mechanism for maintaining fitness and function.
BioEssays, *39*, 1700058.

Lim, S., Bhinge, A., Bragado Alonso, S., Aksoy, I., Aprea, J., Cheok, C.F., Calegari, F., Stanton, L., and Kaldis, P. (2017) Cdk-dependent phosphorylation of Sox2 at serine 39 regulates neurogenesis.
Mol. Cell. Biol., *37*, e00201-17.

Gopinathan, L., Szmyd, R., Low, D., Diril, M.K., Chang, H.-Y., Coppola, V., Liu, K., Tessarollo, L., Guccione, E., van Pelt, A.M.M., and Kaldis, P. (2017)
Emi2 is essential for mouse spermatogenesis.
Cell Reports, *20*, 697-708.

Kim, S.Y., Lee, J.-H., Merrins, M.J., Gavrilova, O., Bisteau, X., Kaldis, P., Satin, L.S., and Rane, S.G. (2017)
Loss of cyclin dependent kinase 2 in the pancreas links primary b-cell dysfunction to progressive depletion of b-cell mass and diabetes.
J. Biol. Chem. *292*, 3841-3853.

Tu, Z., Bayazit, M.B., Liu, H., Zhang, J., Busayavalasa, K., Risal, S., Shao, J., Satyanarayana, A., Coppola, V., Tessarolo, L., Singh, M., Zheng, C., Han, C., Kaldis, P.*, Gustafsson, J.-A.*, and Liu, K.* (2017) Speedy A-Cdk2 binding mediates initial telomere-nuclear envelope attachment during meiotic prophase I independent of Cdk2 activation.
Proc. Natl. Acad. Sci. USA, *114*, 592-597.

Risal, S.*, Zhang, J., Adhikari, D., Liu, X., Shao, J., Hu, M., Busayavalasa, K., Tu, Z., Chen, Z., Kaldis, P.*, and Liu, K. (2017)
MASTL is essential for anaphase entry of proliferating primordial germ cells and establishment of female germ cells in mice.
Cell Discovery, *3*, 16052.

Adhikari, D., Busayavalasa, K., Zhang, J., Hu, M., Risal, S., Bayazit, M.B., Singh, M., Diril, M.K., Kaldis, P.*, and Liu, K.* (2016)
Inhibitory phosphorylation of Cdk1 mediates prolonged prophase I arrest in female germ cells and is essential for female reproductive lifespan.
Cell Research, *26*, 1212-1225.

Jayapal, S.R., Ang, H.Y.-K., Wang, C.Q., Bisteau, X., Caldez, M.J., Gan, X.X., Yu, W., Tergaonkar, V., Osato, M., Lim, B., and Kaldis, P. (2016)
Cyclin A2 regulates erythrocyte morphology and numbers.
Cell Cycle, *15*, 3070-3081.

Huber, R.G., Kulemzina, I., Ang, K., Chavda, A.P., Suranthran, S., The, J.-T., Kenanov, D., Liu, G., Rancati, G., Szmyd, R., Kaldis, P., Bond, P.J., and Ivanov, D. (2016)
Impairing cohesin Smc1/3 head engagement compensates for the lack of Eco1 function.
Structure, *24*, 1991-1999.

Diril, M.K., Bisteau, X., Kitagawa, M., Caldez, M.J., Wee, S., Gunaratne, J., Lee, S.H., and Kaldis, P. (2016)
Loss of the Greatwall kinase weakens the spindle assembly checkpoint.

PLOS Genetics, *12*, e1006310.

Kaldis, P. (2016)
Quo vadis cell growth and division?
Front. Cell Dev. Biol.*, 4*, 95.

Chauhan, S., Diril, M.K., Lee, J.H.S., Bisteau, X., Manoharan, V., Adhikari, D., Ratnacaram, C.K., Janela, B., Noffke, J., Ginhoux, F., Coppola, V., Lui, K., Tessarollo, L., and Kaldis, P. (2016)
Cdk2 catalytic activity is essential for meiotic cell division in vivo.
Biochemical Journal, *473*, 2783-2798.

Palmer, N., and Kaldis, P. (2016)
Regulation of the embryonic cell cycle during mammalian preimplantation development.
Curr. Top. Dev. Biol., *120*, 1-53.

Saito, M., Mulati, M., Talib, S.Z.A., Kaldis, P., Takeda, S., Okawa, A., and Inose, H. (2016)
The indispensable role of cyclin-dependent kinase 1 in skeletal development.
Scientific Reports, *6*, 20622.

Dewhurst, M.R., and Kaldis, P. (2016)
The Speedy A, Cdk2, p27 triangle.
Cell Cycle, *15*, 489-490.

Heijink, A.M, Blomen, V.A., Bisteau, X., Degener, F., Matsushita, F.U., Kaldis, P., Foijer, F., and van Vugt, M.A.T.M. (2015)
A haploid genetic screen identifies the G_1/S regulatory machinery as a determinant of Wee1 inhibitor sensitivity.
Proc. Natl. Acad. Sci. USA, 112, 15160-15165.

Adhikari, D., Liu, K., and Kaldis, P. (2015)
Mastl/PP2A regulate Cdk1 in ooycte maturation.
Oncotraget, *6*, 18734-18735.

Ho, V., Lee, J., Lim, T.S., Steinberg, J., Szmyd, R., Tham, M., Kaldis, P., Abastado, J.-P., and Chew, V. (2015)
TLR3 agonist and Sorafenib combinatorial therapy promotes immune activation and controls hepatocellular carcinoma progression.

Oncotraget, *6*, 27252-27266.

Gillam, M.P., Nimbalkar, D., Sun, L., Christov, K., Ray, D., Kaldis, P., Liu, X., and Kiyokawa, H. (2015)
MEN1-tumorigenesis in the pituitary and pancreatic islet requires *Cdk4* but not *Cdk2*.
Oncogene, *34*, 932-938.

Jayapal SR, Wang CQ, Bisteau X, Caldez MJ, Lim S, Tergaonkar V, Osato M, Kaldis P. (2015)
Hematopoiesis specific loss of Cdk2 and Cdk4 results in increased erythrocyte size and delayed platelet recovery following stress.
Haematologica, 100, 431-438.

Adhikari, D., Diril, M.K., Busayavalasa, K., Risal, S., Nakagawa, S., Lindkvist, R., Shen, Y., Coppola, V., Tessarollo, L., Kudo, N.R., Kaldis, P.*, and Liu, K.* (2014)
Mastl is essential for meiosis II entry but not for meiosis I progression during mouse oocyte maturation.
J. Cell Biol., 206, 843-853. Commentary in Faculty of 1000: http://f1000.com/prime/718885762?ref=ypp.

Bisteau, X. and Kaldis, P**.** (2014)
Spy1/SpeedyA accelerates neuroblastoma.
Oncotarget, 5, 6554-6555.

Gopinathan, L., Tan, S.L.W., Padmakumar, V.C., Coppola, V., Tessarollo, L., and Kaldis, P. (2014)
Loss of Cdk2 and cyclin A2 impairs cell proliferation and tumorigenesis.
Cancer Research, 74, 3870-3879.

Jayapal, S.R. and Kaldis, P. (2014) p57Kip2 regulates T cell development and lymphoma.
Blood, 123, 3370-3371.

Hodge, D.L., Berthet, C., Coppola, V., Kastenmüller, W., Buschman, M.D., Schaughency, P.M., Shirota, H., Scarzello, A.J., Subleski, J.J., Anver, M.R., Ortaldo, J.R., Lin, F., Reynolds, D.A., Sanford, M., Kaldis, P., Tessarollo, L., Klinman, D.M., and Young, H.A. (2014)
IFN-gamma AU-rich element removal promotes chronic IFN-gamma expression and autoimmunity in mice.

J. Autoimmunity, 53, 33-45.

Miettinen, T.P., Pessa, H.K.J., Caldez, M.J., Fuhrer, T., Diril, M.K., Sauer, U., Kaldis, P., and Björklund, M. (2014)
Identification of transcriptional and metabolic programs related to mammalian cell size.
Curr. Biol., 24, 598-608.

Bisteau, X., Caldez, M.J., and Kaldis, P. (2014)
The complex relationship between liver cancer and the cell cycle: a story of multiple regulations.
Cancers, 6*,* 79-111.

Kotoshiba, S., Gopinathan, L., Pfeiffenberger, E., Rahim, A., Vardy, L.A., Nakayama, K., Nakayama, K.I., and Kaldis, P. (2014)
p27 is regulated independently of Skp2 in the absence of Cdk2.
Biochim Biophys Acta, 1843, 436-445.

Poh, W.T., Chadha, G.S., Gillespie, P.J., Kaldis, P., and Blow, J.J. (2014)
Xenopus Cdc7 executes its essential function early in S phase and is counteracted by checkpoint-regulated Protein Phosphatase 1.
Open Biology, 4, 130138.

Jayapal, S.R., and Kaldis, P. (2013)
Cyclin E1 regulates hematopoietic stem cell quiescence.
Cell Cycle, 12, 3588-3588.

Lim, S. and Kaldis, P. (2013)
Cdks, cyclins, and CKIs: roles beyond cell cycle regulation.
Development, 140, 3079-3093.

Lim, S. and Kaldis, P. (2012)
Loss of Cdk2 and Cdk4 induces a switch from proliferation to differentiation in neural stem cells.
Stem Cells, 30, 1509-1520.

Chauhan, S., Zheng, X., Tan, Y.Y., Tay, B.H., Lim, S., Venkatesh, B., and Kaldis, P. (2012)
Evolution of the Cdk-activator Speedy/RINGO in vertebrates.
Cell Mol. Life Sci., 69, 3835-3850.

Diril, M.K., Ratnacaram, C.K., Padmakumar, V.C., Du, T., Wasser, M., Coppola, V., Tessarollo, L., and Kaldis, P. (2012)
Cdk1 is essential for cell division and suppression of DNA re-replication but not for liver regeneration.
Proc. Natl. Acad. Sci. USA, 109, 3826-3831.

Adhikari, D., Zheng, W., Shen, Y., Gorre, N., Halet, G., Kaldis, P., and Liu, K. (2012)
Cdk1, but not Cdk2, is the sole Cdk that is essential and sufficient to drive resumption of meiosis in mouse oocytes.
Hum. Mol. Genetic, 21, 2476-2484.

Zhang, W.C., Ng, S.-C., Yang, H., Rai, A., Umashankar, S., Ma, S., Soh, B.S., Sun, L.L., Tai, B.C., Nga, M.E., Bhakoo,K.K., Jayapal, S.R., Nichane, M., Yu, Q., Ahmed, D.A., Tan, C., Sing, W.P., Tam, J., Thirugananam, A., Noghabi, M.S., Huei, Y., Siang, A.H., Robson, P., Kaldis, P., Soo, R.A., Swarup, S., Lim, E.H., and Lim, B. (2012) Glycine decarboxylase activity drives non-small cell lung cancer tumor initiating cells and tumorigenesis.
Cell, 21, 2476-2484.

Kaldis, P. and Richardson, H. E. (2012)
When cell cycle meets development.
Development, 139, 225-230.

Gopinathan, L., Ratnacaram, C.K., and Kaldis, P. (2011)
Established and novel Cdk/cyclin complexes regulating the cell cycle and development.
Results Probl. Cell Differ., 53, 365-389.

Ray, D., Terao, Y., Christov, K., Kaldis, P., and Kiyokawa, H. (2011)
Cdk2-null mice are resistant to ErbB-2-induced mammary tumorigenesis.
Neoplasia, 13, 439-444.

Mann, M.B. and Kaldis, P. (2011)
Cell cycle transitions and Cdk inhibition in melanoma therapy: Cyclin' through the options.
Cell Cycle, 10, 1349.

Virshup, D.M. and Kaldis, P. (2010)
Enforcing the Greatwall in Mitosis.
Science, 330, 1638-1639.

Jayapal, S.R., Lee, K.L., Ji, P., Kaldis, P., Lim, B., and Lodish, H.F. (2010)
Down-regulation of Myc is essential for terminal erythroid maturation.
J. Biol. Chem., 285, 40252-40265.

Cheok, C.F., Kua, N., Kaldis, P. and Lane, D.P. (2010)
Combination of nutlin-3 and VX-680 selectively targets p53 mutant cells with reversible effects on cells expressing wild-type p53.
Cell Death Differentiation, 17, 1486-1500.

Adon, A.M., Zeng, X., Harrison, M.K., Sannem, S., Kiyokawa, H., Kaldis, P. and Saavedra, H.I. (2010)
Cdk2 and Cdk4 regulate the centrosome cycle and are critical mediators of centrosome amplification in p53-null cells.
Mol. Cell. Biol., 30, 694-710.

Kaldis, P. and Pagano, M. (2009)
Wnt signaling in mitosis.
Developmental Cell, *17*, 749-750.

Satyanarayana, A. and Kaldis, P. (2009)
Mammalian cell cycle regulation: several Cdks, numerous cyclins, and diverse compensatory mechanisms.
Oncogene, *28*, 2925-2939.

Padmakumar, V.C., Aleem, E., Berthet, C., Hilton, M.B., and Kaldis, P. (2009)
Cdk2 and Cdk4 activities are dispensable for tumorigenesis caused by the loss of p53.
Mol. Cell. Biol., *29*, 2582-2593.

Hanse, E.A., Nelsen, C.J., Goggin, M.M., Anttila, C.K., Mullany, L.K., Berthet, C., Kaldis, P., Crary, G.S., Kuriyama, R., and Albrecht, J. (2009)
Cdk2 plays a critical role in hepatocyte cell cycle progression and survival in the setting of cyclin D1 expression in vivo.
Cell Cycle, *8,* 2802-2809.

Satyanarayana, A. and Kaldis, P. (2009)
A dual role of Cdk2 in DNA damage response.
Cell Division, *4*:9.

Kaldis, P. (2009), "Mouse models to investigate cell cycle and cancer", in Millar, J. (ed.), The Cell Division Cycle: Controlling when and where cells divide and differentiate, The Biomedical & Life Sciences Collection, Henry Stewart Talks Ltd, London (online at http://www.hstalks.com/bio)

Li, W., Kotoshiba, S., and Kaldis, P. (2009)
Genetic mouse models to investigate cell cycle regulation.
Transgenic Research, *18*, 491-498.
Li, W., Kotoshiba, S., Berthet, C., Hilton, M.B., and Kaldis, P. (2009)
Rb/Cdk2/ Cdk4 triple mutant mice elicit an alternative mechanism for regulation of the G1/S transition.
Proc. Natl. Acad. Sci. USA *106*, 486-491.

Satyanarayana, A., Berthet, C., Lopez Molina, J., Coppola, V., Tessarollo, L., and Kaldis, P. (2008)
Genetic substitution of Cdk1 by Cdk2 leads to embryonic lethality and loss of meiotic function of Cdk2.
Development, *135*, 3389-3400. (includes cover of issue 20)

Philip, S., Swaminathan, S., Kuznetsov, S.G., Kanugula, S., Biswas, K., Chang, S., Loktionova, N.A., Haines, D.C., Kaldis, P., Pegg, A.E., and Sharan, S.K. (2008)
Degradation of BRCA2 in alkyltransferase-mediated DNA repair and its clinical implication.
Cancer Research, *68*, 9973-9981.

Liem, D.A., Zhao, P., Angelis, E., Chan, S.S., Zhang, J., Wang, G., Berthet, C., Kaldis, P., Ping, P., Maclellan, W.R. (2008)
Cyclin-dependent kinase 2 signaling regulates myocardial ischemia/reperfusion injury.
J. Mol. Cell Cardiol., *45*, 610-616.

Basak, S., Jacobs, S.B.R., Krieg, A.J., Pathak, N., Zeng, Q., Kaldis, P., Giaccia, A.J., and Attardi, L.D. (2008)
The metastasis-associated gene Prlκ 3 is a p53 target involved in cell-cycle regulation.
Molecular Cell, 30, 303-314.
Satyanarayana, A., Hilton, M.B., and Kaldis, P. (2008)
p21 inhibits Cdk1 in the absence of Cdk2 to maintain the G1/S phase DNA damage checkpoint.

Mol. Biol. Cell., 19, 65-77.

Jablonska, B., Aguirre, A., Vanderbosch, R., Belachew, S., Berthet, C., Kaldis, P., and Gallo, V. (2007)
Cdk2 is critical for proliferation and self-renewal of neural progenitor cells in the adult subventricular zone.

J. Cell Biol., 179, 1231-1245.
Vandenbosch, R., Borgs, L., Beukelaers, P., Foidart, A., Nguyen, L., Moonen, G., Berthet, C., Kaldis, P., Gallo, V., Belachew, S., and Malgrange, B. (2007)
Cdk2 is dispensable for adult hippocampal neurogenesis.
Cell Cycle, 6(24), 3065-3069.

Rajareddy, S., Reddy, P., Du, C., Liu, L., Jagarlamudi, K., Tang, W., Shen, Y., Berthet, C., Peng, S.L., Kaldis, P., and Liu, K. (2007)
$p27^{kip1}$ (Cdkn1b) controls ovarian development by suppressing follicle endowment and activation, and promoting follicle atresia in mice.
Mol. Endocrinology, 21, 2189 2202.

Berthet, C., Rodriguez-Galan, M.-C., Hodge, D.L., Gooya, J., Pascal, V., Young, H.A., Keller, J., Bosselut, R., and Kaldis, P. (2007)
Hematopoiesis and thymic apoptosis are not affected by the loss of Cdk2.
Mol. Cell. Biol., 27(14), 5079-5089.

Kaldis, P. (2007)
Another piece of the $p27^{Kip1}$ puzzle.
Cell, 128, 241 244.
Berthet, C., Klarmann, K.D., Hilton, M.B., Suh, H.C., Keller, J.R., Kiyokawa, H., and Kaldis, P. (2006)
Combined loss of Cdk2 and Cdk4 results in embryonic lethality and Rb hypophosphorylation.
Developmental Cell, 10, 563 573.

Berthet, C., and Kaldis, P. (2007)
Cell specific responses to loss of cyclin dependent kinases (Cdks).
Oncogene, 26, 4469-4477.

Geng, Y., Lee, Y., Welcker, M., Swanger, J., Zagozdzon, A., Winer, J.D., Roberts, J.M., Kaldis, P., Clurman, B.E., and Sicinski, P. (2007)
Kinase-independent function of cyclin E.

Molecular Cell, 25, 127 139.

Mikule, K., Delaval, B., Kaldis, P., Jurcyzk, A., Hergert, P., and Doxsey, S. (2007)
Loss of centrosome integrity induces p38-p53-p21-dependent G1-S arrest.
Nature Cell Biology, 9, 160 170.

Berthet, C., and Kaldis, P. (2006)
Cdk2 and Cdk4 cooperatively control the expression of Cdc2.
Cell Division, 1:10.

Deb-Basu, D., Aleem, E., Kaldis, P., and Felsher, D. (2006)
Cdk2 is required by Myc to induce apoptosis.
Cell Cycle, 5, 1342-1347.

Li, W. Q., Jiang, Q., Aleem, E., Kaldis, P., Khaled, A. R., and Durum, S.K. (2006)
IL 7 promotes T cell proliferation through destabilization of $p27^{Kip1}$.
J. Exp. Med., 203, 573 582.

Kaldis, P. and Pagano, M. (2006)
Cell Division, a new open access online forum for and from the cell cycle community.
Cell Division, 1:1.

Fu, Z., Larson, K.A., Chitta, R.K., Turk, B., Lawrence, M.W., Kaldis, P., Galaktionov, K., Cohn, S.M., Shabanowitz, J., Hunt, D.F., and Sturgill, T.W. (2006)
Identification of Yin-Yang regulators and a phosphorylation consensus for male germ cell-associated kinase (MAK)-related kinase.
Mol. Cell. Biol., 26(22), 8639 8654.

Price, P.M., Yu, F., Kaldis, P., Aleem, E., Nowak, G., Safirstein, R.L., and Megyesi, J. (2006)

Dependence of Cisplatin-induced cell death in vitro and in vivo on cyclin-dependent kinas 2.
J. Am. Soc. Nephrol., 17(9), 2434-2442.
Robinson-White, A., Leitner, W., Aleem, E., Kaldis, P., and Stratakis, C. (2006)
PRKAR1A-inactivation leads to increased proliferation and decreased apoptosis in Human B-lymphocytes.
Cancer Res., 66(21), 10603 10612.

Asefa, B., Dermott, J.M., Kaldis, P., Garfinkel, D.J., Stefanisko, K., and Keller, J.R. (2006) p205, a potential tumor suppressor, inhibits cell proliferation via multiple pathways of cell cycle regulation.
FEBS Letters, 580, 1205-1214.

Aleem, E., and Kaldis, P. (2006)
Mouse models of cell cycle regulators: new paradigms. Results Probl.
Cell Differ., 42, 271-328.

Kaldis, P. (2006)
Cell Cycle Regulation in the series Results and Problems in Cell Differentiation, Vol. 42, Springer-Verlag GmbH, Heidelberg, Germany, ISBN 3-540-34552-3.

Aleem, E., Kiyokawa, H., and Kaldis, P. (2005)
Cdc2/cyclin E complexes regulate G1/S phase transition.
Nature Cell Biology, 7, 831 836.

Kaldis, P., and Aleem, E. (2005)
Cell cycle sibling rivalry: Cdk2 versus Cdc2.
Cell Cycle, 4, 1489-1492.

Campaner, S., Kaldis, P., Israeli, S., and Krisch, I.R. (2005)
Sil is a regulator of the mitotic checkpoint.
Mol. Cell. Biol., 25, 6660 6672.

Fu, Z., Schroeder, M.J., Shabanowitz, J., Kaldis, P., Togawa, K., Rustgi, A.K., Hunt, D.F., and Sturgill, T.W. (2005)
Activation of a nuclear Cdc2-related kinase within a mitogen-activated protein kinase-like TDY motif by autophosphorylation and cyclin-dependent protein kinase-activating kinase.
Mol. Cell. Biol., 25, 6047 6064.

Cheng, A., Gerry, S., Kaldis, P., and Solomon, M.J. (2005)
Biochemical characterization of Cdk2-Speedy/Ringo A2.
BMC Biochemistry, 6, 19.

Kaldis, P. (2005) The N terminal peptide of the KSHV cyclin determines substrate specificity.
J. Biol. Chem., 280, 11165-11174.

Sugaya, M., Watanabe, T., Yang, A., Starost, M.F., Kobayashi, H., Atkins, A.M., Borris, D.L., Hanan, E.A., Schimel, D., Bryant, M.A., Roberts, N., Skobe, M., Staskus, K.A., Kaldis, P., and Blauvelt, A. (2005)
Lymphatic dysfunction in transgenic mice expressing KSHV *k-cyclin* under the control of the VEGFR-3 promoter.
Blood, 105, 2356-2363.

Aleem, E.*, Berthet, C.*, and Kaldis, P. (2004)
Cdk2 as a master of S phase entry: fact or fake?
Cell Cycle, 3, 35-37.

Shuman, J. D., Sebastian, T., Kaldis, P., Copeland, T. D., Zhu, S., Smart, R. C., and Johnson, P. F. (2004)
Cell cycle dependent phosphorylation of C/EBP? mediates oncogenic cooperativity between C/EBP? and H-Ras^{V12}.
Mol. Cell. Biol., 24, 7380 7391.

Berthet, C.*, Aleem, E.*, Coppola, V., Tessarollo, L., and Kaldis, P. (2003)
Cdk2 knockout mice are viable.
Curr. Biol., 13, 1775-1785.

Schaber, M., Lindgren, A., Schindler, K., Bungard, D., Kaldis, P., and Winter, E. (2002)
CAK1 promotes meiosis and spore formation in *Saccharomyces cerevisiae* in a CDC28-independent fashion.
Mol. Cell. Biol., 22, 57-68.

Kaldis, P. (editor) The CDK-activating kinase [CAK] (2002)
in Molecular Biology Intelligence Unit 25, ISBN 0-306-47438-7, Georgetown, TX Landes Bioscience/ Eurekah.com and New York, NY Kluwer Academic/Plenum Publishers.

Kaldis, P., Tsakraklides, V., Ross, K. E., Winter, E., and Cheng, A. (2002)
Activating phosphorylation of cyclin-dependent kinases in budding yeast. In The CDK-activating kinases (CAK), P. Kaldis, ed. (Austin, TX: R. G. Landes Co.), 13-30.

Kaldis, P., Ojala, P. M., Tong, L., Mkel, T. P., and Solomon, M. J. (2001)
CAK independent activation of CDK6 by a viral cyclin.
Mol. Biol. Cell, 12, 3987-3999.

Cheng, A., Kaldis, P., and Solomon, M. J. (2000)
Dephosphorylation of human cyclin-dependent kinases by protein phosphatase type 2C? and ?2 isoforms.
J. Biol. Chem., 275, 34744-34749.

Enke, D. A, Kaldis, P., and Solomon, M. J. (2000)
Kinetic analysis of the cdk-activating kinase (Cak1p) from budding yeast.
J. Biol. Chem., 275, 33267-33271.

Kaldis, P., Cheng, A., and Solomon, M. J. (2000)
The effects of changing the site of activating phosphorylation in cdk2 from threonine to serine.
J. Biol. Chem., 275, 32578-32584.

Kaldis, P., and Solomon, M. J. (2000).
Analysis of CAK activities in human cells. Eur.
J. Biochem., 267, 4213-4221.

Ross, K. E., Kaldis, P., and Solomon, M. J. (2000).
Activating phosphorylation of the *Saccharomyces cerevisiae* cyclin-dependent kinase, Cdc28p, precedes cyclin binding.
Mol. Biol. Cell 11, 1597-1609.

Cheng, A., Ross, K. E., Kaldis, P., and Solomon, M. J. (1999).
Dephosphorylation of cyclin-dependent kinases by type 2C protein phosphatases.
Genes & Dev. 13, 2946 2957.

Kimmelman, J., Kaldis, P., Hengartner, C. J., Laff, G. M., Koh, S. S., Young, R. A., and Solomon, M. J. (1999).
Activating phosphorylation of the Kin28p subunit of yeast TFIIH by Cak1p.
Mol. Cell. Biol. 19, 4774-4787.

Kaldis, P. (1999).
The cdk-activating kinase: from yeast to mammals.
Cell. Mol. Life Sci. 55, 284-296.

Enke, D. A., Kaldis, P., Holmes, J. K., and Solomon, M. J. (1999).
The cdk-activating kinase (Cak1p) from budding yeast has an unusual ATP-binding pocket.
J. Biol. Chem. 274, 1949-1956.

Nagahara, H., Ezhevsky, S. A., Vocero-Akbani, A. M., Kaldis, P., Solomon, M. J., and Dowdy, S. F. (1999)
Transforming growth factor beta targeted inactivation of cyclin E:cyclin-dependent kinase (Cdk2) complexes by inhibition of Cdk2 activating kinase activity.
Proc. Natl. Acad. Sci. USA 96, 14961-14966.

Kaldis, P., Pitluk, Z. W., Bany, I. A., Enke, D. A., Wagner, M., Winter, E., and Solomon, M. J. (1998).
Localization and regulation of the cdk-activating kinase (Cak1p) from budding yeast.
J. Cell Sci. 111, 3585-3596.

Kaldis, P., Russo, A. A., Chou, H. S., Pavletich, N. P., and Solomon, M. J. (1998).
Human and yeast cdk-activating kinases (CAKs) display distinct substrate specificities.
Mol. Biol. Cell 9, 2545-2560.

Solomon, M. J., and Kaldis, P. (1998).
Regulation of cdks by phosphorylation. In Results and Problems in Cell Differentiation "Cell cycle control", M. Pagano, ed. (Heidelberg: Springer), pp. 79-109.

Kaldis, P., Sutton, A., and Solomon, M. J. (1996).
The cdk-activating kinase (CAK) from budding yeast.
Cell 86, 553-564.

Kaldis, P., Kamp, G., Piendl, T., and Wallimann, T. (1997).
Functions of creatine kinase isoenzymes in spermatozoa. In Advances in Developmental Biology, P. M. Wassarman, ed. (Greenwich, CT: JAI Press Inc.), pp. 275-311.

Kaldis, P., Hemmer, W., Zanolla, E., Holtzman, D., and Wallimann, T. (1996).
'Hot spots' of creatine kinase localization in brain: cerebellum, hippocampus and choroid plexus.
Dev. Neurosci. 18, 542-554.

Kaldis, P., Stolz, M., Wyss, M., Zanolla, E., Rothen-Rutishauser, B., Vorherr, T., and Wallimann, T. (1996). Identification of two distinctly localized mitochondrial creatine kinase

isoenzymes in spermatozoa.
J. Cell Sci. 109, 2079-2088.

Kaldis, P., and Wallimann, T. (1995).
Functional differences between dimeric and octameric mitochondrial creatine kinase.
Biochem. J. 308, 623-627.

Brdiczka, D., Kaldis, P., and Wallimann, T. (1994).
In vitro complex formation between the octamer of mitochondrial creatine kinase and porin.
J. Biol. Chem. 269, 27640 27644.

Kaldis, P. (1994).
Mitochondrial creatine kinase isoenzymes: structure/function-relationship. Thesis No. 10686.
Institute for Cell Biology, Swiss Federal Institute of Technology (ETH), Zrich, Switzerland.

Kaldis, P., Furter, R., and Wallimann, T. (1994).
The N-terminal heptapeptide of mitochondrial creatine kinase is important for octamerization.
Biochemistry 33, 952 959.

Kaldis, P., Eppenberger, H. M., and Wallimann, T. (1993).
A short N-terminal domain of mitochondrial creatine kinase is involved in octamer formation but not in membrane binding. In New developments in lipid-protein interaction and receptor function, K. W. A. Wirtz, L. Packer, J. A. Gustafsson, A. E. Evangelopoulos and J. P. Changeux, eds. (New York and London: Plenum Press), pp. 199-211.

Furter, R., Kaldis, P., Furter-Graves, E. M., Schnyder, T., Eppenberger, H. M., and Wallimann, T. (1992).
Expression of active octameric chicken cardiac mitochondrial creatine kinase in Escherichia coli.
Biochem. J. 288, 771-775.