

Errata:

Andjelkovic, M., D. R. Alessi, et al. (1997). "Role of translocation in the activation and function of protein kinase B." *J Biol Chem* 272: 31515-31524.

Andrade, M. A. and P. Bork (1995). "HEAT repeats in the Huntington's disease protein." *Nature genetics* 11: 115-116.

Ayuso, M. I., M. Hernandez-Jimenez, et al. (2010). "New hierarchical phosphorylation pathway of the translational repressor eIF4E-binding protein 1 (4E-BP1) in ischemia-reperfusion stress." *The Journal of biological chemistry* 285: 34355-34363.

Belham, C., S. Wu, et al. (1999). "Intracellular signalling: PDK1--a kinase at the hub of things." *Current biology* : CB 9: R93-96.

Benne, R. and J. W. Hershey (1978). "The mechanism of action of protein synthesis initiation factors from rabbit reticulocytes." *J Biol Chem* 253: 3078-3087.

Bosotti, R., A. Isacchi, et al. (2000). "FAT: a novel domain in PIK-related kinases." *Trends in biochemical sciences* 25: 225-227.

Caruthers, J. M., E. R. Johnson, et al. (2000). "Crystal structure of yeast initiation factor 4A, a DEAD-box RNA helicase." *Proceedings of the National Academy of Sciences of the United States of America* 97: 13080-13085.

Christie, G. R., E. Hajduch, et al. (2002). "Intracellular sensing of amino acids in *Xenopus laevis* oocytes stimulates p70 S6 kinase in a target of rapamycin-dependent manner." *The Journal of biological chemistry* 277: 9952-9957.

Corradetti, M. N. and K. L. Guan (2006). "Upstream of the mammalian target of rapamycin: do all roads pass through mTOR?" *Oncogene* 25: 6347-6360.

Dames, S. A., J. M. Mulet, et al. (2005). "The solution structure of the FATC domain of the protein kinase target of rapamycin suggests a role for redox-dependent structural and cellular stability." *The Journal of biological chemistry* 280: 20558-20564.

Dumont, F. J. and Q. Su (1996). "Mechanism of action of the immunosuppressant rapamycin." *Life sciences* 58: 373-395.

Dumstorf, C. A., B. W. Konicek, et al. (2010). "Modulation of 4E-BP1 function as a critical determinant of enzastaurin-induced apoptosis." *Molecular cancer therapeutics* 9: 3158-3163.

Green, M. R., T. Maniatis, et al. (1983). "Human beta-globin pre-mRNA synthesized in vitro is accurately spliced in *Xenopus* oocyte nuclei." *Cell* 32: 681-694.

Hannan, K. M., G. Thomas, et al. (2003). "Activation of S6K1 (p70 ribosomal protein S6 kinase 1) requires an initial calcium-dependent priming event involving formation of a high-molecular-mass signalling complex." *The Biochemical journal* 370: 469-477.

Hara, K., Y. Maruki, et al. (2002). "Raptor, a binding partner of target of rapamycin (TOR), mediates TOR action." *Cell* 110: 177-189.

Hay, N. and N. Sonenberg (2004). "Upstream and downstream of mTOR." *Genes & development* 18: 1926-1945.

Hilbert, M., F. Kebbel, et al. (2011). "eIF4G stimulates the activity of the DEAD box protein eIF4A by a conformational guidance mechanism." *Nucleic acids research* 39: 2260-2270.

Jacinto, E., R. Loewith, et al. (2004). "Mammalian TOR complex 2 controls the actin cytoskeleton and is rapamycin insensitive." *Nature cell biology* 6: 1122-1128.

Johnstone, C. N., S. Castellvi-Bel, et al. (2005). "PRR5 encodes a conserved proline-rich protein predominant in kidney: analysis of genomic organization, expression, and mutation status in breast and colorectal carcinomas." *Genomics* 85: 338-351.

Kim, D. H., D. D. Sarbassov, et al. (2002). "mTOR interacts with raptor to form a nutrient-sensitive complex that signals to the cell growth machinery." *Cell* 110: 163-175.

Kim, D. H., D. D. Sarbassov, et al. (2003). "GbetaL, a positive regulator of the rapamycin-sensitive pathway required for the nutrient-sensitive interaction between raptor and mTOR." *Molecular cell* 11: 895-904.

Kovacina, K. S., G. Y. Park, et al. (2003). "Identification of a proline-rich Akt substrate as a 14-3-3 binding partner." *The Journal of biological chemistry* 278: 10189-10194.

Leung, A. K. and W. L. Robson (2007). "Tuberous sclerosis complex: a review." *Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners* 21: 108-114.

Liu, J., J. D. Farmer, Jr., et al. (1991). "Calcineurin is a common target of cyclophilin-cyclosporin A and FKBP-FK506 complexes." *Cell* 66: 807-815.

Loewith, R., E. Jacinto, et al. (2002). "Two TOR complexes, only one of which is rapamycin sensitive, have distinct roles in cell growth control." *Molecular cell* 10: 457-468.

Ma, D., X. Bai, et al. (2010). "Rheb GTPase controls apoptosis by regulating interaction of FKBP38 with Bcl-2 and Bcl-XL." *The Journal of biological chemistry* 285: 8621-8627.

Maag, D., C. A. Fekete, et al. (2005). "A conformational change in the eukaryotic translation preinitiation complex and release of eIF1 signal recognition of the start codon." *Molecular cell* 17: 265-275.

Marcotrigiano, J., I. B. Lomakin, et al. (2001). "A conserved HEAT domain within eIF4G directs assembly of the translation initiation machinery." *Molecular cell* 7: 193-203.

Mizushima, N., B. Levine, et al. (2008). "Autophagy fights disease through cellular self-digestion." *Nature* 451: 1069-1075.

- Oshiro, N., K. Yoshino, et al. (2004). "Dissociation of raptor from mTOR is a mechanism of rapamycin-induced inhibition of mTOR function." *Genes to cells : devoted to molecular & cellular mechanisms* 9: 359-366.
- Pisarev, A. V., V. G. Kolupaeva, et al. (2006). "Specific functional interactions of nucleotides at key -3 and +4 positions flanking the initiation codon with components of the mammalian 48S translation initiation complex." *Genes & development* 20: 624-636.
- Proud, C. G. (2007). "Signalling to translation: how signal transduction pathways control the protein synthetic machinery." *The Biochemical journal* 403: 217-234.
- Pyronnet, S. (2000). "Phosphorylation of the cap-binding protein eIF4E by the MAPK-activated protein kinase Mnk1." *Biochemical pharmacology* 60: 1237-1243.
- Rodgers, B. D., M. A. Levine, et al. (2001). "Insulin regulation of a novel WD-40 repeat protein in adipocytes." *The Journal of endocrinology* 168: 325-332.
- Sabatini, D. M., H. Erdjument-Bromage, et al. (1994). "RAFT1: a mammalian protein that binds to FKBP12 in a rapamycin-dependent fashion and is homologous to yeast TORs." *Cell* 78: 35-43.
- Sarbassov, D. D., D. A. Guertin, et al. (2005). "Phosphorylation and regulation of Akt/PKB by the rictor-mTOR complex." *Science* 307: 1098-1101.
- Schalm, S. S. and J. Blenis (2002). "Identification of a conserved motif required for mTOR signaling." *Current biology : CB* 12: 632-639.
- Schalm, S. S., D. C. Fingar, et al. (2003). "TOS motif-mediated raptor binding regulates 4E-BP1 multisite phosphorylation and function." *Current biology : CB* 13: 797-806.
- Scheper, G. C. and C. G. Proud (2002). "Does phosphorylation of the cap-binding protein eIF4E play a role in translation initiation?" *European journal of biochemistry / FEBS* 269: 5350-5359.
- Schroder, W., N. Cloonan, et al. (2004). "Alternative polyadenylation and splicing of mRNAs transcribed from the human Sin1 gene." *Gene* 339: 17-23.
- Schroder, W. A., M. Buck, et al. (2007). "Human Sin1 contains Ras-binding and pleckstrin homology domains and suppresses Ras signalling." *Cellular signalling* 19: 1279-1289.
- Schutz, P., M. Bumann, et al. (2008). "Crystal structure of the yeast eIF4A-eIF4G complex: an RNA-helicase controlled by protein-protein interactions." *Proceedings of the National Academy of Sciences of the United States of America* 105: 9564-9569.
- Sengoku, T., O. Nureki, et al. (2006). "Structural basis for RNA unwinding by the DEAD-box protein *Drosophila* Vasa." *Cell* 125: 287-300.
- Shiota, C., J. T. Woo, et al. (2006). "Multiallelic disruption of the rictor gene in mice reveals that mTOR complex 2 is essential for fetal growth and viability." *Developmental cell* 11: 583-589.

- Toker, A. and A. C. Newton (2000). "Cellular signaling: pivoting around PDK-1." *Cell* 103: 185-188.
- Tomoo, K., F. Abiko, et al. (2006). "Effect of N-terminal region of eIF4E and Ser65-phosphorylation of 4E-BP1 on interaction between eIF4E and 4E-BP1 fragment peptide." *Journal of biochemistry* 140: 237-246.
- Unbehaun, A., S. I. Borukhov, et al. (2004). "Release of initiation factors from 48S complexes during ribosomal subunit joining and the link between establishment of codon-anticodon base-pairing and hydrolysis of eIF2-bound GTP." *Genes & development* 18: 3078-3093.
- Wang, L., T. E. Harris, et al. (2007). "PRAS40 regulates mTORC1 kinase activity by functioning as a direct inhibitor of substrate binding." *The Journal of biological chemistry* 282: 20036-20044.
- Wang, X., A. Beugnet, et al. (2005). "Distinct signaling events downstream of mTOR cooperate to mediate the effects of amino acids and insulin on initiation factor 4E-binding proteins." *Molecular and cellular biology* 25: 2558-2572.
- Woo, S. Y., D. H. Kim, et al. (2007). "PRR5, a novel component of mTOR complex 2, regulates platelet-derived growth factor receptor beta expression and signaling." *The Journal of biological chemistry* 282: 25604-25612.
- Yang, Q., K. Inoki, et al. (2006). "TSC1/TSC2 and Rheb have different effects on TORC1 and TORC2 activity." *Proceedings of the National Academy of Sciences of the United States of America* 103: 6811-6816.
- Yonezawa, K., C. Tokunaga, et al. (2004). "Raptor, a binding partner of target of rapamycin." *Biochemical and biophysical research communications* 313: 437-441.
- Zindy, P., Y. Berge, et al. (2011). "Formation of the eIF4F translation initiation complex determines sensitivity to anti-cancer drugs targeting the EGF and HER2 receptors." *Cancer research*.