

Research articles

111. Rierola, M., Trushina, Monteiro-Abreu, N., N.I., Conze, C., Holtmannspötter, M., Kurre, R., Holzer, M., Arendt, T., Heinisch, J.J., Brandt, R., Bakota, L. (2022) Tau and α -synuclein shape microtubule organization and microtubule-dependent transport in neuronal dendrites. in preparation.
110. Bischof, L., Schweitzer, F., Sterk, C.C., Heinisch, J.J. (2022) Walk apart and strike together – The role of the dimeric guanidine nucleotide exchange factor Dck1/Lmo1 for yeast Rho5. in preparation for **Intl. J. Mol. Sci.** .
109. Klinke, N., Meyer, H., Ratnavadivel, S., Reinhardt, M., Heinisch, J.J., Malmendal, A., Milting, H., Paululat, A. (2022) A *Drosophila melanogaster* model for *TMEM43* related arrhythmic right ventricular cardiomyopathy type 5. **Cell. Molec. Life Sci.**, revision submitted.
108. Schiemann, R., Buhr, A., Cordes, E., Walter, S., Heinisch, J.J., Ferrero, P., Milting, H., Paululat, A., Meyer, H. (2022) Neprilysins regulate muscle contraction and heart function via cleavage of membrane integral SERCA-inhibitory micropeptides. **Nature Commun.**, accepted May 30, 2022.
107. Conze, C., Rierola, M., Trushina, N.I., Peters, M., Janning, D., Holzer, M., Heinisch, J.J., Arendt, T., Bakota, L., Brandt, R. (2022) Caspase-cleaved tau is senescence-associated and induces a toxic gain of function by putting a brake on axonal transport. **Molec. Psychiatry**, Online ahead of print April 07, 2022. doi: 10.1038/s41380-022-01538-2.
106. Rodicio R., Schmitz, H.-P., Heinisch, J.J. (2022) Genetic and physiological characterization of fructose-1,6-bisphosphate aldolase and glyceraldehyde-3-phosphate dehydrogenase in the Crabtree-negative yeast *Kluyveromyces lactis*. **Intl. J. Mol. Sci.** 23, 772. doi: 10.3390/ijms23020772.
105. Musielak, M., Sterk, C., Meyer, C., Paululat, A., Heinisch, J.J. (2021) The small GTPase KIRho5 responds to oxidative stress and affects cytokinesis. **J. Cell Sci.** 134, jcs258301. doi: 10.1242/jcs.258301
104. Vazquez, X., García, P., García, V., de Toro, M., Ladero, V., Heinisch, J.J., Fernández, J., Rodicio, R., Rodicio M.R. (2021) Genomic analysis and phylogenetic position of the complex IncC plasmid found in the Spanish monophasic clone of *Salmonella enterica* serovar Typhimurium. **Scientific Reports** 11, 11482. doi: 10.1038/s41598-021-90299-z.
103. Voskoboynikova, N., Karlova, M., Kurre, R., Shaitan, K.V., Sokolova, O.S., Steinhoff, H.-J., Heinisch, J.J. (2021) A three-dimensional model of the yeast transmembrane sensor Wsc1 obtained by SMA-based detergent-free purification and transmission electron microscopy. **J. Fungi**, 7, 118. doi: 10.3390/jof7020118.
102. Esch, B., Limar, S., Bogdanowski, A., Gournas, C., More, T., Sundag, C., Walter, S., Heinisch, J.J., Ejsing, C.S., André, B., Fröhlich, F. (2020) Uptake of exogenous serine is important to maintain sphingolipid homeostasis in *Saccharomyces cerevisiae*. **PLoS Genet.**, 16:e1008745. doi: 10.1371/journal.pgen.1008745.
101. Dehnen, L., Janz, M., Kumar Verma, J., Ekaterini Psathaki, O., Langemeyer, L., Fröhlich, F., Heinisch, J.J., Meyer, H., Ungermann, C., Paululat, A. (2020) A trimeric metazoan Rab7 GEF complex is crucial for endocytosis and scavenger function. **J. Cell Sci.**, 133:jcs247080. doi: 10.1242/jcs.247080.

100. Heinisch, J.J., Knuesting, J., Scheibe, R. (2020) Investigation of heterologously expressed glucose-6-phosphate dehydrogenase genes in a yeast *zwf1* deletion. **Microorganisms**, 8, 546; doi:10.3390/microorganisms8040546.
99. Sterk, C., Gräber, L., Schmitz, H.P., Heinisch, J.J. (2019) Analysis of functional domains in Rho5, the yeast homolog of human Rac1 GTPase, in oxidative stress response. **Int. J. Mol. Sci.**, 20, 5550, doi:10.3390/ijms20225550.
98. Oviaño, M., Rodicio, M.R., Heinisch, J.J., Rodicio, R., Bou, G., Fernández, J. (2019) Analysis of the degradation of broad-spectrum cephalosporins by OXA-48-producing Enterobacteriaceae using MALDI-TOF MS. **Microorganisms**, 7, 614. doi: 10.3390/microorganisms7120614.
97. Schmitz, H.P., Jendretzki, A., Sterk, C., Heinisch, J.J. (2018) The small yeast GTPase Rho5 and its dimeric GEF Dck1/Lmo1 respond to glucose starvation. **Int. J. Mol. Sci.** 19, 2186. doi: 10.3390/ijms19082186.
96. Vitavska, O., Bartölke, R., Tabke, K., Heinisch, J.J., Wieczorek, H. (2018) Interaction of sucrose transporters with a 14-3-3 protein. **Biochem. J.** 475, 3239-3254. doi: 10.1042/BCJ20180293.
95. Schneider, M., Knuesting, J., Birkholz, O., Heinisch, J.J., Scheibe, R. (2018) Cytosolic GAPDH as a redox-dependent regulator of energy metabolism. **BMC Plant Biol.** 18, 184. doi: 10.1186/s12870-018-1390-6.
94. Gauthier-Kemper, A., Suarez Alonso, M., Sündermann, F., Niewidok, B., Fernandez, M.P., Bakota, L., Heinisch, J.J., Brandt, R. (2018) Annexin A2 and A6 interact with the extreme N terminus of tau and thereby contribute to tau's axonal localization. **J. Biol. Chem.** 293, 8065-8076. doi: 10.1074/jbc.RA117.000490.
93. Rothstein, B., Post, Y., Reinhardt, M., Buhr, A., Heinisch, J.J., Meyer, H., Paululat, A. (2018) Distinct domains in the matricellular protein Lonely heart are crucial for cardiac extracellular matrix formation and heart function in *Drosophila*. **J. Biol. Chem.**, 293, 7864-7879. doi: 10.1074/jbc.M117.817940.
92. Mojardin, L., Vega, M., Moreno, F., Schmitz, H.P., Heinisch, J.J., Rodicio, R.R. (2018) Lack of NAD⁺-dependent glycerol 3-phosphate dehydrogenase impairs the function of transcription factors Sip4 and Cat8 required for ethanol utilization in *Kluyveromyces lactis*. **Fungal Genet. Biol.** 111, 16-29. doi: 10.1016/j.fgb.2017.11.006.
91. Langenberg, A.K., Bink, F.J., Wolff, L., Walter, S., von Wallbrunn, C., Grossmann, M., Heinisch, J.J., Schmitz, H.P. (2017) Glycolytic functions are conserved in the genome of the wine yeast *Hanseniaspora uvarum*, and pyruvate kinase limits its capacity for alcoholic fermentation. **Appl. Environm. Microbiol.** 83, e01580-17. doi: 10.1128/AEM.01580-17.
90. Rippert, D., Backhaus, K., Rodicio, R., Heinisch, J.J. (2017) Cell wall synthesis and central carbohydrate metabolism are interconnected by the SNF1/Mig1 pathway in *Kluyveromyces lactis*. **Eur. J. Cell Biol.** 96, 70-81. doi: 10.1016/j.ejcb.2016.12.004.
89. Arimoto, K.-I., Löchte, S., Stoner, S.A., Burkart, C., Zhang, Y., Miyauchi, S., Wilmes, S., Fan, J.-B., Heinisch, J., Yan, M., Pellegrini, S., Colland, F., Piehler, J., Zhang, D.-E. (2017) STAT2 is an essential adaptor in USP18-mediated suppression of type I interferon signaling. **Nature Struct. Molec. Biol.** 24, 279-289. doi: 10.1038/nsmb.3378.

88. Hallier, B., Chiemann, R., Cordes, E., Vitos-Faleato, J., Walter, S., Heinisch, J.J., Malmendal, A., Paululat, P., Meyer, H. (2016) *Drosophila* neprilysins control insulin signaling via cleavage of regulatory peptides. *eLife*: e19430. doi: 10.7554/eLife.
87. Kock, C., Arlt, H., Ungermann, C., Heinisch, J.J. (2016) Yeast cell wall integrity sensors form specific plasma membrane microdomains important for signalling. *Cell. Microbiol.* 18, 1251-1267. doi: 10.1111/cmi.12635.
86. Rippert, D., Heinisch, J.J. (2016) Investigation of the role of four mitotic septins and chitin synthase 2 for cytokinesis in *Kluyveromyces lactis*. *Fungal Genet. Biol.* 94, 69-78. doi: 10.1016/j.fgb.2016.07.007
85. Ivanusic, D., Heinisch, J.J., Eschricht, M., Laube, U., Denner, J. (2015) Improved Y2H screening technique to identify surface membrane protein-protein interactions. *BioTechniques* 59, 63-73.
84. Schmitz, H.P., Jendretzki, A., Jendretzki, J., Wiechert, J., Heinisch, J.J. (2015) Identification of the Dck1/Lmo1 complex as a regulator of the small GTPase Rho5 in *Saccharomyces cerevisiae*. *Mol. Microbiol.* 96, 306-324. doi: 10.1111/mmi.12937.
83. Raasch, K., Malecki, E., Siemann, M., Martinez, M., Heinisch, J., Mueller, J., Bakota, L., Kaltschmidt, C., Kaltschmidt, B., Rosemeyer, H., Brandt, R. (2015) Identification of nucleoside analogues as inducers of neuronal differentiation in a human reporter cell line and adult stem cells. *Chem. Biol. Drug Des.* 86, 129-143. doi: 10.1111/cbdd.12488.
82. Rippert, D., Heppeler, N., Albermann, S., Schmitz, H.P., Heinisch, J.J. (2014) Regulation of cytokinesis in the milk yeast *Kluyveromyces lactis*. *Biochim. Biophys. Acta - Mol. Cell Res.* 1843, 2685-2697.
81. Janning, D., Igaev, M., Sündermann, F., Brühmann, J. , Beutel, O., Heinisch, J.J., Bakota, L., Piehler, J., Junge, W., Brandt, R. (2014) Single molecule tracking of tau reveals fast kiss-and-hop interaction with microtubules in living neurons. *Mol. Biol. Cell* 25, 3541-3551.
80. Bartölke, R., Heinisch, J.J., Wieczorek, H., Vitavska, O. (2014) Proton-associated sucrose transport of mammalian solute carrier family 45: an analysis in *Saccharomyces cerevisiae*. *Biochem. J.* 464, 193-201.
79. Rosemeyer, H., Paululat, A., and Heinisch, J.J. (2014) "Yeast mail": A novel *Saccharomyces* application (NSA) to encrypt messages. *Chem. Biodiv.* 11, 1364-1373.
78. Backhaus, K., Rippert, D., Heilmann, C.J., Sorgo, A.G., de Koster, C.G., Klis, F.M., Rodicio, R., Heinisch J.J. (2013) Mutations in the SNF1 complex genes affect yeast cell wall strength. *Eur. J. Cell Biol.* 92, 383-395.
77. Tögel, M., Meyer, H., Lehmacher, C., Heinisch, J.J., Pass, G., Paululat, A. (2013) The bHLH transcription factor hand is required for proper wing heart formation in *Drosophila*. *Dev. Biol.* 381, 446-459.
76. Alsteens D., Dupres V., Yunus S., Latgé J.P., Heinisch J.J., Dufrêne Y.F. (2012) High-resolution imaging of chemical and biological sites on living cells using peak force tapping atomic force microscopy. *Langmuir* 49, 16738-16744.
75. Paululat, A. and Heinisch, J.J. (2012) New yeast/*E. coli/Drosophila* triple shuttle vectors for efficient generation of *Drosophila* P element transformation constructs. *Gene* 511, 300-305.

74. Panz, M., Vitos-Faleato, J., Jendretzki, A., Heinisch, J.J., Paululat, A., and Meyer, H. (2012) A novel role for the non-catalytic intracellular domain of Neprilysins in muscle physiology. **Biol. Cell** 104, 553-568.
73. Wang, S., Meyer, H., Ochoa-Espinosa, A., Buchwald, U., Önel, S., Altenhein, B., Heinisch, J., Afolter, M., and Paululat, A. (2012) GBF1 (Gartenzwerg)-dependent secretion is required for *Drosophila* tubulogenesis. **J. Cell Sci.** 125, 461-472.
72. Bakota, L., Brandt, R., and Heinisch, J.J. (2012) Triple mammalian/yeast/bacterial shuttle vectors for single and combined Lentivirus- and Sindbis virus-mediated infections of neurons. **Mol. Genet. Genomics** 287, 313-324.
71. Dupres, V., Heinisch, J.J., and Dufrêne, Y. (2011) Atomic Force Microscopy demonstrates that disulfide bridges are required for clustering of the yeast cell wall integrity sensor Wsc1. **Langmuir** 27, 15129-15134.
70. Gauthier-Kemper, A., Weissmann, K., Golovyashkina, N., Sebö-Lemke, Z., Drewes, G., Gerke, V., Heinisch, J.J., and Brandt, R. (2011) The frontotemporal dementia mutation R406W blocks tau's interaction with the membrane in an annexin A2-dependent manner. **J. Cell Biol.** 192, 647-661.
69. Dupres, V., Dufrêne, Y. and Heinisch, J.J. (2010) Measuring cell wall thickness in living yeast cells using single molecular rulers. **ACS Nano** 4, 5498-5504.
68. Bermejo, C., García, R., Straede, A., Rodríguez-Peña, J.M., Nombela, C., Heinisch, J.J., and Arroyo, J. (2010) Investigation of sensor-specific stress response by transcriptional profiling of *wsc1* and *mid2* deletion strains and chimeric sensors in *Saccharomyces cerevisiae*. **Omics** 14, 679-688.
67. Wilk, S., Wittland, J., Thywissen, A., Schmitz, H.P., and Heinisch, J.J. (2010): A block of endocytosis of the yeast cell wall integrity sensors Wsc1 and Wsc2 results in a reduced fitness *in vivo*. **Mol. Genet. Genomics** 284, 217-229.
66. Heinisch, J.J., Dupres, V., Wilk, S., Jendretzki, A., and Dufrêne, Y.F. (2010): Single-molecule atomic force microscopy reveals clustering of the yeast plasma-membrane sensor Wsc1. **PlosOne** 5: e11104.
65. Backhaus, K., Heilmann, C.J., Sorgo, A.G., Purschke, G., de Koster, C.G., Klis, F.M., and Heinisch, J.J. (2010): A systematic study of the cell wall composition of *Kluyveromyces lactis*. **Yeast** 27, 647-660.
64. Heinisch, J.J., Dupres, V., and Dufrene, Y.F. (2010): Measuring the mechanical behaviour of yeast membrane sensors using atomic force microscopy. **Nature Protocols** 5, 670-677.
63. Heinisch, J.J., Buchwald, U., Gottschlich, A., Heppeler, N., and Rodicio, R. (2010): A tool kit for molecular genetics of *K. lactis* comprising a congenic strain series and a set of versatile vectors. **FEMS Yeast Res.** 10, 333-342.
62. Jendretzki, A., Ciklic, I., Rodicio, R., Schmitz, H.P., and Heinisch, J.J. (2009): Cyk3 acts in actomyosin ring independent cytokinesis by recruiting Inn1 to the yeast bud neck. **Mol. Genet. Genomics** 282, 437-451.
61. Dupres, V., Alsteens, D., Wilk, S., Hansen, B., Heinisch, J.J., and Dufrênes, Y.F. (2009): The yeast Wsc1 cell surface sensor behaves like a nanospring *in vivo*. **Nature Chem. Biol.** 5, 857-862.

60. Rodicio, R., López, M.L., Cuadrado, S., Cid, A.F., Redruello, B., Moreno, F., Heinisch, J.J., Hegewald, A.K., and Breunig, K.D. (2008): Differential control of isocitrate lyase gene transcription by non-fermentable carbon sources in the milk yeast *Kluyveromyces lactis*. **FEBS Lett.** 582, 549-557.
59. Rodicio, R., Buchwald, U., Schmitz, H.-P. and Heinisch, J.J. (2008): Dissecting sensor functions in cell wall integrity signalling in *Kluyveromyces lactis*. **Fung. Genet. Biol.** 45, 422-435.
58. Straede, A. and Heinisch, J.J. (2007): Functional analyses of the extra- and intracellular domains of the yeast cell wall integrity sensors Mid2 and Wsc1. **FEBS-Lett.** 581, 4495-4500
57. Brockmann, R., Beyer, A., Heinisch, J.J. and Wilhelm, T. (2007): Posttranscriptional expression regulation: What determines translation rates ?. **PLoS Comput. Biol.** 3, e57, 0531-0539. doi: 10.1371/journal.pcbi.0030057.
56. Straede, A., Coran, A., Bundy, J. and Heinisch, J.J. (2007): The effect of tea tree oil and antifungal agents on a reporter for yeast cell integrity signalling. **Yeast** 24, 321-334.
55. Schehl, B., Senn, T., Lachenmeier, D., Rodicio, R. and Heinisch, J.J. (2007): Contribution of the fermenting yeast strain to ethyl carbamate generation in stone fruit spirits. **Appl. Microbiol. Biotechnol.** 74, 843-850.
54. Rodicio, R., Koch, S., Schmitz, H.P. and Heinisch, J.J. (2006): *KIRHO1* and *KIPKC1* are essential for cell integrity signalling in *Kluyveromyces lactis*. **Microbiol.** 152, 2635-2649.
53. Schehl, B., Lachenmeier, D., Senn, T. and Heinisch, J.J. (2005): Effect of the stone content on the quality of plum and cherry spirits produced from mash fermentations with commercial and laboratory yeast strains. **J. Agricult. Food Chem.** 53, 8230-8238.
52. Glatthar, J., Heinisch, J. and Senn, T. (2005): Unmalted triticale cultivars as brewing adjuncts: Effects of enzyme activities and composition on beer quality. **J. Sci. Food Agricult.** 85, 647-654.
51. Schehl, B., Müller, C., Senn, T. and Heinisch, J.J. (2004): Use of a laboratory yeast strain in spirit production. **Yeast** 21, 1375-1389.
50. Luz López, M., Redruello, B., Valdés, E., Moreno, E., Heinisch, J.J. and Rodicio, R. (2004): Isocitrate lyase of the yeast *Kluyveromyces lactis* is subject to glucose repression but not to catabolite inactivation. **Curr. Genet.** 44, 305-316.
49. Lorberg, A., Schmitz, H.P., Gengenbacher, U. and Heinisch, J.J. (2003): *KIROM2* encodes an essential GEF homologue in *Kluyveromyces lactis*. **Yeast** 20, 611-624.
48. Glatthar, J., Heinisch, J. and Senn, T. (2003): The use of unmalted triticale in brewing and its effect on beer quality. **J. Amer. Soc. Brew. Chem.** 61, 182-190.
47. Glatthar, J., Heinisch, J. and Senn, T. (2002): A study on the suitability of unmalted triticale as a brewing adjunct. **J. Amer. Soc. Brew. Chem.** 60, 181-187.
46. Edelmann, A., Kirchberger, J., Heinisch, J.J. and Kopperschläger, G. (2002): C-terminal modification of 6-phosphofructo-1-kinase from *Saccharomyces cerevisiae* and its influence on enzyme structure and activity. **Biophys. Biochem. Res. Commun.** 295, 992-999.
45. Schmitz, H.P., Huppert, S., Lorberg, A. and Heinisch, J.J. (2002): Rho5p down-regulates the yeast cell integrity pathway. **J. Cell Sci.** 115, 3139-3148.

44. Gueldener, U., Heinisch, J., Koehler, G. Voss, D. and Hegemann, J.H. (2002) A second generation of *loxP* marker cassettes for cre-mediated multiple gene knock-outs in budding yeast. **Nucl. Acids Res.** 30 (6), e23.
43. Schmitz, H.P., Lorberg, A. and Heinisch, J.J. (2002) Regulation of yeast protein kinase C activity by interaction with the small GTPase Rho1p through its amino-terminal HR1 domain. **Mol. Microbiol.** 44, 829-840.
42. Lorberg, A., Schmitz, H.P., Jacoby, J.J. and Heinisch, J.J. (2001) Lrg1p functions as a putative GTPase-activating protein in the Pkc1p-mediated cell integrity pathway in *Saccharomyces cerevisiae*. **Mol. Genet. Genom.** 266, 514-526.
41. Lorberg, A., Jacoby, J.J., Schmitz, H.P. and Heinisch, J.J. (2001) The PH domain of the yeast GEF Rom2p serves an essential function *in vivo*. **Mol. Genet. Genom.** 266, 505-513.
40. Schmitz, H.P., Jöckel, J., Block, C. and Heinisch, J.J. (2001) Domain shuffling as a tool for investigation of protein function: Exchange of the cysteine-rich region of yeast Pkc1p for those of Raf kinase and Pkc η . **J. Mol. Biol.** 311, 1-7.
39. Rodicio, R., Strauß, A. and Heinisch, J.J. (2000) Single point mutations in either gene encoding the subunits of the heterooctameric yeast phosphofructokinase abolish allosteric inhibition by ATP. **J. Biol. Chem.** 275, 40952-40960.
38. Kirchrath, L., Lorberg, A., Schmitz, H.P., Gengenbacher, U. and Heinisch, J.J. (2000) Comparative genetic and physiological studies on the MAP kinase Mpk1p from *Kluyveromyces lactis* and *S.cerevisiae*. **J. Mol. Biol.** 300, 743-758.
37. Kirchberger, J., Edelmann, A., Kopperschläger, G. and Heinisch, J.J. (1999) A single point mutation leads to an instability of the heterooctameric structure of yeast phosphofructokinase. **Bioch. J.** 341, 15-23.
36. Jacoby, J.J., Kirchrath, L., Gengenbacher, U. and Heinisch, J.J. (1999) Characterization of *KIBCK1*, encoding a MAP kinase kinase kinase of *Kluyveromyces lactis*. **J. Mol. Biol.** 288, 337-352.
35. Wang, Y.L., Choi, H.K., Aul, C., Gattermann, N. and Heinisch, J. (1999) The MERRF mutation of mitochondrial DNA in the bone marrow of a patient with acquired idiopathic sideroblastic anemia. **Amer. J. Haematol.** 60, 83-84.
34. Lorberg, A., Kirchrath, L., Ernst, J. and Heinisch, J.J. (1999) Genetic and biochemical characterization of phosphofructokinase from the opportunistic pathogenic yeast *Candida albicans*. **Eur. J. Biochem.** 260, 217-226.
33. Jacoby, J.J., Nilius, S..M. and Heinisch, J.J. (1998) A screen for upstream components of the yeast protein kinase C signal transduction pathway identifies the product of the *SLG1* gene. **Mol. Gen. Genet.** 258, 148-155.
32. Heinisch, J.J., Müller, S., Schlüter, E., Jacoby, J.J. and Rodicio, R. (1998) Investigation of two yeast genes encoding putative isoenzyme of phosphoglycerate mutase. **Yeast** 14, 203-213.
31. Obmolova, G., Kopperschläger, G., Heinisch, J. and Rypniewsky, W.R. (1998) Crystallisation and preliminary X-ray analysis of the 12S form of phosphofructokinase from *Saccharomyces cerevisiae*. **Acta Crystal.** D54, 96-98.

30. Gattermann, N., Wang, Y.-L., Retzlaff, S., Heinisch, J., Aul, C. and Schneider, W. (1998) Mutations of mitochondrial DNA as an early event in the pathogenesis of myelodysplastic syndromes. In: **Experimental approaches and novel therapies: Acute Leukemias VII**; Hiddemann et al. (eds); Springer-Verlag, Berlin/Heidelberg: 29-41.
29. Gattermann, N., Retzlaff, S., Wang, Y.-L., Bröker, S., Hofhaus, G., Heinisch, J., Aul, C. and Schneider, W. (1997) Heteroplasmic point mutations of mitochondrial DNA affecting subunit I of cytochrome c oxidase in two patients with acquired idiopathic sideroblastic anemia. **Blood**, 90: 4961-4972.
28. Jacoby, J.J., Schmitz, H.P. and Heinisch, J.J. (1997) Mutants affected in the putative diacylglycerol binding site of yeast protein kinase C. **FEBS-Lett.** 417, 219-222.
27. Boles, E., Schulte, F., Miosga, T., Freidel, K., Schlüter, E., Zimmermann, F.K., Hollenberg, C.P. and Heinisch, J.J. (1997) Characterization of a glucose-repressed pyruvate kinase (Pyk2p) in *Saccharomyces cerevisiae* that is catalytically insensitive to fructose-1,6-bisphosphate. **J. Bacteriol.** 179, 2987-2993.
26. Jacoby, J.J. and Heinisch, J.J. (1997) Analysis of a transketolase gene from *Kluyveromyces lactis* reveals that the yeast enzymes are more related to transketolases of prokaryotic origins than to those of higher eukaryotes. **Curr. Genet.** 31, 15-21.
25. Liesen, T., Hollenberg, C.P. and Heinisch, J.J. (1996) ERA, a novel *cis*-acting element required for autoregulation and ethanol repression of *PDC1* transcription in *Saccharomyces cerevisiae*. **Mol. Microbiol.** 21, 621-632.
24. Heinisch, J.J., Boles, E. and Timpel, C. (1996) A yeast phosphofructokinase insensitive to the allosteric activator fructose-2,6-bisphosphate. **J. Biol. Chem.** 271, 15928-15933.
23. Heinisch, J.J., Valdés, E., Alvarez, J. and Rodicio, R. (1996) Molecular genetics of *ICL2*, encoding a non-functional isocitrate lyase in *Saccharomyces cerevisiae*. **Yeast** 12, 1285-1295.
22. Gattermann, N., Retzlaff, S., Wang, Y.L., Berneburg, M., Heinisch, J., Wlaschek, M., Aul, C. and Schneider, W. (1996) A heteroplasmic point mutation of mitochondrial tRNA^{Leu(CUN)} in non-lymphoid cell lineages from a patient with acquired idiopathic sideroblastic anaemia (AISA). **Brit. J. Haematol.** 93, 845-855.
21. Estévez, A.M., Heinisch, J.J. and Aragón, J.J. (1995) Functional complementation of yeast phosphofructokinase mutants by the non-allosteric enzyme from *Dictyostelium discoideum*. **FEBS Lett.** 374, 100-104.
20. Gattermann, N., Berneburg, M., Heinisch, J., Aul, C. and Schneider, W. (1995) Detection of ageing-associated 5-kb common deletion of mitochondrial DNA in blood and bone marrow of hematologically normal adults. Absence of the deletion in clonal bone marrow disorders. **Leukemia** 9, 1704-1710.
19. Raben, N., Exelbert, R., Spiegel, R., Sherman, J.B., Plotz, P. and Heinisch, J. (1995) Functional expression of human mutant phosphofructokinase (PFK-M) in yeast - Genetic Defects in French Canadian and Swiss patients with PFK deficiency. **Amer. J. Hum. Genet.** 56, 131-141.
18. Arvanitidis, A. and Heinisch, J.J. (1994) Studies on the function of yeast phosphofructokinase subunits by *in vitro* mutagenesis. **J. Biol. Chem.** 269, 8911-8918.

17. Heinisch, J.J. (1993) Expression of heterologous phosphofructokinase genes in yeast. **FEBS Lett.** 328, 35-40.
16. Jacoby, J., Hollenberg, C.P. and Heinisch, J.J. (1993) Transaldolase mutants in the yeast *Kluyveromyces lactis* provide evidence that the glucose can be metabolized through the pentose phosphate pathway. **Mol. Microbiol.** 10, 867-876.
15. Boles, E., Heinisch, J. and Zimmermann, F.K. (1993) Different signals control the activation of glycolysis in the yeast *Saccharomyces cerevisiae*. **Yeast** 9, 761-770.
14. Heinisch, J., Kirchrath, L., Liesen, T., Vogelsang, K. and Hollenberg, C.P. (1993) Molecular genetics of phosphofructokinase in the yeast *Kluyveromyces lactis*. **Mol. Microbiol.** 8, 559-570.
13. Heinisch, J. (1993) *PFK2*, *ISP42*, *ERG2* and *RAD14* are located on the right arm of chromosome XIII. **Yeast** 9, 1103-1105.
12. Rodicio, R., Heinisch, J. and Hollenberg, C.P. (1993) Transcriptional control of yeast phosphoglycerate mutase-encoding gene. **Gene** 125, 125-133.
11. Heinisch, J., Vogelsang, K. and Hollenberg, C.P. (1991) Transcriptional control of yeast phosphofructokinase gene expression. **FEBS Lett.** 289, 77-82.
10. Heinisch, J., von Borstel, R.C. and Rodicio, R. (1991) Sequence and localization of the gene encoding yeast phosphoglycerate mutase. **Curr. Genet.** 20, 167-171.
9. Schaaff, I., Heinisch, J. and Zimmermann, F.K. (1989) Overproduction of glycolytic enzymes in yeast. **Yeast** 5, 285-290.
8. Heinisch, J., Ritzel, R.G., von Borstel, R.C., Aguilera, A., Rodicio, R. and Zimmermann, F.K. (1989) The phosphofructokinase genes of yeast evolved from two duplication events. **Gene** 78, 309-321.
7. Rodicio, R. and Heinisch, J. (1987) Isolation of the yeast phosphoglyceromutase gene and construction of deletion mutants. **Mol. Gen. Genet.** 206, 133-140.
6. Heinisch, J. (1986) Construction and physiological characterization of mutants disrupted in the phosphofructokinase genes of *Saccharomyces cerevisiae*. **Curr. Genet.** 11, 227- 234.
5. Heinisch, J. (1986) Isolation and characterization of the two structural genes coding for phosphofructokinase in yeast. **Mol. Gen. Genet.** 202, 75-82.
4. Seehaus, T., Rodicio, R., Aguilera, A., Heinisch, J., Schmitt, H.D. and Zimmermann, F.K. (1985) Specific gene probes as tools in yeast taxonomy. **Curr. Genet.** 11, 103-110.
3. Rodicio, R., Schmitt, H.D., Heinisch, J. and Zimmermann, F.K. (1984) A hybrid DNA sequence containing the replication origin of the multicopy yeast plasmid 2 μ m circle and an additional repeated sequence can convert maltose-negative into maltose-positive strains. **Mol. Gen. Genet.** 197, 491-496.
2. Breitenbach-Schmitt, I., Schmitt, H.D., Heinisch, J. and Zimmermann, F.K. (1984) Genetic and physiological evidence for the existence of a second glycolytic pathway in yeast parallel to the phosphofructokinase-aldolase reaction sequence. **Mol. Gen. Genet.** 195, 536-540.
1. Breitenbach-Schmitt, I., Heinisch, J., Schmitt, H.D. and Zimmermann, F.K. (1984) Yeast mutants without phosphofructokinase activity can still perform glycolysis and alcoholic fermentation. **Mol. Gen. Genet.** 195, 530-535.

PhD thesis:

Heinisch, J. (1985) Physiologische und molekulargenetische Untersuchungen zur Hefe-Phosphofructokinase, Dissertation am Institut für Mikrobiologie, Technische Hochschule Darmstadt.

Reviews, commentaries, and book chapters

35. Bertels, L.-K., Fernández Murillo, L. and Heinisch, J.J. (2021) The pentose phosphate pathway in yeasts – more than a poor cousin of glycolysis. *Biomolecules* 11: 725. doi: 10.3390/biom11050725.
34. Heinisch, J.J. (2020) Commentary - How to study intertwined and autoregulated eukaryotic signal transduction pathways. *FEBS J.* 287: 4844-4847. doi:10.1111/febs.15298
33. Hühn, J., Musielak, M., Schmitz, H.P. and Heinisch, J.J. (2020) Fungal homologues of human Rac1 as emerging players in signal transduction and morphogenesis. *Internl. Microbiol.* 23: 43-53. doi: 10.1007/s10123-019-00077-1.
32. Carmona-Gutierrez, D., ... Heinisch, J.J., Madeo, F {total of 87 authors} (2018) Guidelines and recommendations on the nomenclature of yeast cell death. *Microb. Cell* 5(1): DOI 10.15698/mic2018.01.607.
31. Heinisch, J.J. and Rodicio, R. (2018) Protein kinase C in fungi - more than just cell wall integrity. *FEMS Microbiol. Rev.* 42, 22-39. DOI 10.1093/femsre/fux051
30. Heinisch, J.J. and Rodicio, R. (2017) Stress response in wine yeast. In: **Biology of Microorganisms on Grapes, in Must and Wine (2nd ed.)**. König, H., Unden, G. and Fröhlich, J. (Eds.). Springer Verlag, Berlin/Heidelberg. Chp. 16, pp. 377-395. DOI 10.1007/978-3-319-60021-5_16.
29. Rodicio, R. and Heinisch, J.J. (2017) Carbohydrate metabolism in wine yeast. In: **Biology of Microorganisms on Grapes, in Must and Wine (2nd ed.)**. König, H., Unden, G. and Fröhlich, J. (Eds.). Springer Verlag, Berlin/Heidelberg. Chp. 8, pp. 189-213. DOI 10.1007/978-3-319-60021-5_8.
28. Schweisthal, S., Sterk, C., and Heinisch, J.J. (2016) Hilfe für gestresste Hefen: der Zellwand-Integritätsweg. *Biospektrum* 2/2016, 131-133. DOI: 10.1007/s12268-016-0664-5
27. Heinisch, J.J. and Brandt, R. (2016) Signaling pathways and posttranslational modifications of tau in Alzheimer's disease: the humanization of yeast cells. *Microbial Cell* 3, 135-146. DOI: 10.15698/mic2016.04.489
26. Lipke, P.N., Heinisch, J.J., and Dufrêne, Y.F. (2015) How microbes sense and respond to force: A single-molecule view. in: **Cells, Forces, and Microenvironment**, Chapter 2, Cuerrier, C.M. and Pelling A.E. (Eds.), Pan Stanford Publishing Pte. Ltd., ISBN 978-981-4613-36-1 (Hardcover), 978-981-4613-37-8 (eBook)
25. Kock, C., Dufrêne, Y.F., and Heinisch, J.J. (2015) Up against the wall: Is yeast cell wall integrity ensured by mechanosensing in plasma membrane microdomains? *Appl. Environment. Microbiol.* 81, 806-811.

24. Rodicio, R. and Heinisch, J.J. (2013) Yeast on the milky way: Genetics, physiology and biotechnology of the yeast *Kluyveromyces lactis*. **Yeast** 30, 165-177.
23. Merzendorfer, H. and Heinisch, J.J. (2013) Microcompartments within the yeast plasma membrane. **Biol. Chem.** 394, 189-202.
22. Heinisch, J.J., Lipke, P., Beaussart, A., Chatel, S.E.K., Dupres, V., and Dufrêne, Y.F. (2012) Atomic force microscopy – looking at mechanosensors on the cell surface. **J. Cell Sci.** 125, 4189-4195.
21. Heinisch, J.J. and Dufrêne, Y.F. (2012) Single molecule atomic force microscopy of cellular sensors. In: **AFM in liquids**. Baro, A.M. and Reifenberger, R. (Eds.). Wiley VCH.
20. Backhaus, K., Buchwald, U., Heppeler, N., Schmitz, H.-P., Rodicio, R., and Heinisch, J.J. (2011) Milk and sugar: Regulation of cell wall synthesis in the milk yeast *Kluyveromyces lactis*. **Eur. J. Cell Biol.** 90, 745-750.
19. Jendretzki, A., Wittland, J., Wilk, S., Straede, A., and Heinisch, J.J. (2011) How do I begin? – Sensing extracellular stress to maintain yeast cell wall integrity. **Eur. J. Cell Biol.** 90, 740-744.
18. Heinisch, J.J. and Palamarczyk, G. (2010) Biology of fungal cell walls - from single proteins to regulatory networks. **Yeast** 27, 461-463.
17. Rodicio, R. and Heinisch, J.J. (2010) Together we are strong: Cell wall integrity sensors in yeasts. **Yeast** 27, 531-540.
16. Heinisch, J.J. and Dufrene, Y.F. (2010) Is there anyone out there? - Single-molecule atomic force microscopy meets yeast genetics to study sensor functions. **Integr. Biol.** 2, 408-415.
15. Heinisch, J.J. and Rodicio, R. (2009) Physical and chemical stress factors in yeast. In: **Biology of Microorganisms on Grapes, in Must and Wine**. König, H., Unden, G. and Fröhlich, J. (Eds.). Springer Verlag, Berlin/Heidelberg. Chp. 15, pp. 275-291.
14. Rodicio, R. and Heinisch, J.J. (2009) Sugar metabolism by *Saccharomyces* and non-*Saccharomyces* yeasts. In: **Biology of Microorganisms on Grapes, in Must and Wine**. König, H., Unden, G. and Fröhlich, J. (Eds.). Springer Verlag, Berlin/Heidelberg. Chp. 6, pp. 113-134.
13. Heinisch, J.J. (2008) Baker's yeast as a tool for the development of antifungal drugs which target cell integrity - an update. **Expert Opin. Drug Discov.** 3, 931-943
12. Strahl, S. and Heinisch, J.J. (2007) Fungal cell wall biosynthesis: A view on biodiversity in fungi and application of '-omics'. **Yeast** 24, 217-219.
11. Heinisch, J.J. (2005) Baker's yeast as a tool for the development of antifungal kinase inhibitors - Targeting protein kinase C and the cell integrity pathway. **Biochim. Biophys. Acta**: 1754, 171-182.
10. Schmitz, H.P. and Heinisch, J.J. (2003) Evolution, biochemistry and genetics of protein kinase C in fungi. **Curr. Genet.** 43, 245-254.
9. Heinisch, J.J., Lorberg, A., Schmitz, H.P. and Jacoby, J.J. (1999) The protein kinase C-mediated MAP kinase pathway involved in the maintenance of cellular integrity in *Saccharomyces cerevisiae*. **Mol. Microbiol.** 32, 671-680.
8. Lorberg, A. and Heinisch, J.J. (1997) Phosphofructokinase - noch immer ein Schlüsselenzym der Glykolyse? - **Biospektrum** 5/1997, 43-45.

7. Heinisch, J.J. and Rodicio, R. (1997) Fructose-1,6-bisphosphate aldolase, triosephosphate isomerase, glyceraldehyde-3-phosphate dehydrogenase and phosphoglycerate mutase. In: F.K.Zimmermann and K.-D. Entian (eds.) **Yeast sugar metabolism**, Technomic Publishing Co.,Inc., Lancaster, Pennsylvania, USA., pp.: 119-140
6. Kopperschläger, G. and Heinisch, J.J. (1997) Phosphofructokinase. In: F.K.Zimmermann and K.-D. Entian (eds.) Yeast sugar metabolism, Technomic Publishing Co.,Inc., Lancaster, Pennsylvania, USA., pp.: 97-118.
5. Heinisch, J. (1994) Das Ubiquitin-System bei Eukaryonten. **Bioscope** 1/94, 29-36.
4. Heinisch, J.J. and Hollenberg, C.P. (1993) Yeasts. In: H.J.Rehm and G.Reed (eds.), **Biotechnology**, 2nd edition, Vol. 1, Chapter 14, VCH Verlagsgesellschaft, Weinheim, FRG: 469-514.
3. Heinisch, J. and Zimmermann, F.K. (1985) Is the phosphofructokinase reaction obligatory for glucose fermentation by *Saccharomyces cerevisiae*? **Yeast** 1, 173-175.
2. Zimmermann, F.K., Heinisch, J., and Scheel, I. (1985) Tests for the induction of mitotic aneuploidy in the yeast *Saccharomyces cerevisiae* strain D-61-M. In: Evaluation of Short-Term Tests for Carcinogens, **Progress in Mutation Research** (J. Ashby, F.J. de Serres, M. Draper, M. Ishidate, Jr., B.H. Margolin, B.E. Matter, and M.D. Shelby, eds.), Elsevier Science Publishers B.V., Amsterdam, Vol. 5, pp. 235-242.
1. Parry, J.M., Arni, P., Brooks, T., Carere, A., Ferguson, L., Heinisch, J., Inge-Vechtomov, S., Loprieno, N., Nestmann, E., and von Borstel, R.C. (1985) Summary report on the performance of the yeast and *Aspergillus* assays, In: Evaluation of Short-Term Tests for Carcinogens, **Progress in Mutation Research** (J. Ashby, F.J. de Serres, M. Draper, M. Ishidate, Jr., B.H. Margolin, B.E. Matter, and M.D. Shelby, eds.), Elsevier Science Publishers B.V., Amsterdam, Vol. 5, pp. 25-46.

Textbook edited

Paululat, A. & Heinisch, J.J. (eds) (2019) **Campbell Biologie**. 11th German Edition. Authors: Urry, Cain, Wassermann, Minorsky, Reece; Campbell Biology. Pearson Deutschland GmbH; Hallbergmoos/Germany. ISBN 978-3-86894-366-5.

Heinisch, J.J. & Paululat, A. (eds) (2015/16) **Campbell Biologie**. 10th German Edition. Authors: Reece, Urry, Cain, Wassermann, Minorsky, Jackson Campbell Biology. Pearson Deutschland GmbH. ISBN 3868942599.

"Belletristik"

Langenberg, A.K., Herrmann, J.V., Schmitz, H.P., Heinisch, J.J. (2013) Die Methode des DNA-Fingerabdrucks zur Stammidentifizierung von *Kloeckera apiculata/Hanseniaspora uvarum* in der Weinbereitung. in: **Deutsches Weinbau Jahrbuch 2014**. Schultz, H.-R. und Stoll, M. (Eds.), 65. Jahrgang, Verlag Eugen Ulmer KG, Stuttgart, pp. 209-216.

Bink, F.J. und Heinisch, J.J. (2011) Genetische Untersuchungen an der Weinhefe *Kloeckera apiculata* (*Hanseniaspora uvarum*). in **Deutsches Weinbau Jahrbuch 2011**. Schultz, H.-R. und Stoll, M. (Eds.), 62. Jahrgang, Verlag Eugen Ulmer KG, Stuttgart, pp. 49-55.

Heinisch, J.J. (2006) Ungebetene Gäste: Bakterielle Kontaminationen in der Hefeproduktion. In: **Votragstexte der VH-Hefetagung** in Hamburg. Herausgeber: Versuchsanstalt der Hefeindustrie e.V.. 43-51.

Heinisch, J.J. (2002): Hefen: Mikrobiologie, Genetik und Gentechnik Teil II. **Kleinbrennerei 12/2002**.

Heinisch, J.J. (2002): Hefen: Mikrobiologie, Genetik und Gentechnik Teil I. **Kleinbrennerei 11/2002**.

Ranked list of publications JJH

(last updated June 8, 2022) a total of **4871** (4180 w/o self) citations in 3511 articles

H-Factors: Web of Science = 37 (Google Scholar from April 2022 = 47); on average 39 citations/paper

Color codes: black print = original research paper; blue print = reviews/comments (peer reviewed); Q = Journal Quartile Category

single author	first author	last/corresp. author	co-corresp. author	co-author
Nr.	Citations	Publication		
1	655 (1014)	Deletion cassettes (pUG72/73); Gueldener <i>et al.</i> in Nucleic Acids Res. 2002; Q1		
2	282 (430)	PKC pathway review in Mol. Microbiol. 1999; Q2		
3	222 (346)	Overproduction glycolysis Schaaff, Heinisch, Zimmermann in Yeast 1989; Q2		
4	140 (228)	Translation rates; Brockmann <i>et al.</i> in PLOS Computat. Biol. 2007; Q1		
5	120 (240)	Heteroplasmic point mutations of mito-DNA; with Gattermann in Blood 1997; Q1		
6	111 (146)	High-resolution AFM, Alsteens <i>et al.</i> in Langmuir 2012; Q2		
7	109 (174)	WSC1 nanospring; Dupres <i>et al.</i> in Nature Chem Biol. 2009; Q1		
8	96 (141)	SLG1 (=WSC1) Jacoby <i>et al.</i> in Mol. Gen. Genet. 1998; Q2		
9	95 (129)	tau kiss and hop, Janning <i>et al.</i> MBC2014; Q2		
10	94 (131)	Guidelines for yeast cell death nomenclature; in Microb. Cell 2018		
11	93 (129)	Frontotemporal tau; Gauthier-Kemper <i>et al.</i> in JCB 2011; Q1		
12	86 (153)	Isolation of <i>PFK</i> genes in Mol. Gen. Genet. 1986; Q2		
13	85 (108)	STAT2 and USP18, Arimoto <i>et al.</i> in Nat. Struct. Mol. Biol. 2017; Q1		
14	84 (94)	PFK sequences in Gene 1989; Q2		
15	83 (127)	<i>PYK2</i> with Eckhard Boles in J. Bacteriol. 1997; Q2		
16	81 (111)	PFK subunits, Arvanitidis and Heinisch in JBC 1994; Q2		
17	76 (128)	Together we are strong, Sensor-Review, Rodicio and Heinisch in Yeast 2010; Q2		
18	68 (107)	Sensor clustering in PLOS ONE 2010; Q2		
19	66 (102)	Yeast on the milky way; <i>K.lactis</i>-Review, Rodicio and Heinisch in Yeast 2013; Q2		
20	66 (94)	Glycolytic signals with Eckhard Boles in Yeast 1993; Q2		
21	59 (91)	How do I begin? Jendretzki <i>et al.</i>, Review in Eur. J. Cell Biol. 2011; Q3		
22	56 (77)	hmPFK with Nina Raben in Americ. J. Human Genet. 1995; Q1		
23	53 (65)	Contribution of yeast to EC, Schehl <i>et al.</i> in Appl. Microbiol. Biotech. 2007; Q2		
24	52 (62)	KlMPK1 Kirchrath <i>et al.</i> in J. Mol. Biol. 2000; Q1		
25	50 (63)	KITAL1 Jacoby <i>et al.</i> in Mol. Microbiol. 1993; Q2		
26	47 (58)	PKC-Review, Heinisch and Rodicio in Microbiol. Rev. 2018; Q1		
27	46 (81)	Up against the wall; Kock <i>et al.</i>: Minireview on sensors in AEM 2015; Q1/Q2		
28	44 (59)	Review on antifungals and PKC in BBA 2005; Q3		
29	43 (56)	Cell wall thickness AFM; Dupres <i>et al.</i> in ACS Nano2010; Q1		
30	43 (71)	Functional analyses and sensor distribution; Straede <i>et al.</i> in FEBS Lett. 2007; Q3		
31	43 (60)	PKC-Review, Schmitz and Heinisch in Curr. Genet. 2003; Q2		
32	42 (65)	ERA-PDC1 Liesen <i>et al.</i> in Mol. Microbiol. 1996; Q2		
33	41 (58)	CYK3-Paper Jendretzki <i>et al.</i> in Mol. Genet. Genom. 2009; Q3		
34	41 (50)	PFK disruptions and antiserum in Curr. Genet. 1986; Q2		
35	40 (56)	F2,6P activation of PFK; Heinisch, Boles and Timpel in JBC 1996; Q2		
36	38 (69)	Rho5 downregulates the yeast cell integrity ... Schmitz <i>et al.</i> in J. Cell Sci. 2002; Q2		
37	38 (60)	HR1 domains in <i>PKC1</i> Schmitz <i>et al.</i> in Mol. Microbiol. 2002; Q2		
38	37 (52)	<i>K.lactis</i> cell wall composition; Backhaus <i>et al.</i> in Yeast 2010; Q2		
39	37 (58)	LRG1-Paper; Lorberg <i>et al.</i> in Mol. Gen. Genom. 2001; Q3		
40	36 (48)	Dissecting <i>K.lactis</i> sensor functions, Rodicio <i>et al.</i> in Fungal Genet Biol 2008; Q2		
41	35 (46)	Yeast CWI sensors form microdomains, Kock <i>et al.</i> in Cell. Microbiol. 2016; Q2/Q3		
42	35 (61)	A heteroplasmic point mutation ...; with Gattermann in British J Haematol 1996; Q1		
43	33 (46)	Cytosolic GAPDH; Schneider <i>et al.</i> in BMC Plant Biol. 2018; Q1		
44	33 (70)	Review on AFM and CWI sensors in JCS 2012; Q2		
45	33 (42)	Endocytosis of CWI sensors, Wilk <i>et al.</i> in Mol. Genet. Genom. 2010; Q3		
46	33 (54)	Sensor-AFM in Nature Protocols 2010; Q1		

47	33 (55)	Bone marrow disorders with Norbert Gattermann in Leukemia 1995; Q1
48	33 (38)	Molecular genetics of KIPFK; in Mol. Microbiol. 1993; Q2
49	33 (47)	Genetic and physiological evidence .. yeast PFK... in Mol. Gen. Genet. 1984; Q2
50	32 (40)	Annexins A2 and A6; Gauthier-Kemper <i>et al.</i> JBC 2018; Q2
51	32 (39)	Ethyl carbamate in spirits, Schehl <i>et al.</i> in JAgricFoodChem 2005; Q1
52	30 (38)	Specific gene probes ... Seehaus <i>et al.</i> in Curr. Genet. 1985; Q2
53	30 (39)	Yeast mutants without phosphofructokinase ... in Mol. Gen. Genet. 1984; Q2
54	29 (54)	Transcriptome of sensor hybrids, Bermejo <i>et al.</i> in OMICs 2010; Q2
55	28 (35)	DAG binding domain of PKC; Jaboby <i>et al.</i> in FEBS Lett. 1997; Q3
56	26 (43)	Tea tree oil and CWI activation, Straede <i>et al.</i> in Yeast 2007; Q2
57	26 (46)	Single point mutations in PFKatp binding site, Rodicio <i>et al.</i> in JBC 2000; Q2
58	26 (36)	pUK1921 in Yeast 1993; Q2
59	26 (39)	Transcriptional control of yeast PFK gene expression in FEBS Lett. 1991; Q3
60	25 (34)	PKC domain shuffling, Schmitz <i>et al.</i> in J. Mol. Biol. 2001; Q1
61	24 (30)	Mammalian sucrose transporters, Bartölke <i>et al.</i> in Biochem. J. 2014; Q2
62	24 (34)	SNF1 and yeast cell wall; Backhaus <i>et al.</i> in Eur. J. Cell Biol. 2013; Q3
63	24 (26)	KIICL1-Paper, Luz-López <i>et al.</i> in Curr. Genet. 2004; Q2
64	23 (36)	K.lactis congenic series in FEMSYR 2010; Q2
65	22 (33)	Tau-Review; Heinisch and Brandt in Microbial Cell 2016
66	22 (36)	GBF1 Gartenzwerg of <i>Drosophila</i> ; Wang <i>et al.</i> in JCS 2012; Q2
67	22 (37)	Isoenzymes of yeast phosphoglycerate mutase in Yeast 1998; Q2
68	21 (24)	KIRHO1 and KIPKCI, Rodicio <i>et al.</i> in Microbiol. 2006; Q3
69	19 (44)	Unmalted triticale; Glatthar <i>et al.</i> in J. Sci. Food Agric. 2005; Q2
70	19 (38)	The use of unmalted triticale, Glatthar <i>et al.</i> in JAmScBrewChem 2003; Q4
71	19 (32)	GPM1 promoter studies, Rodicio <i>et al.</i> in Gene 1993; Q2
72	19 (28)	GPM1 isolation and deletion, in Mol. Gen. Genet. 1987; Q2
73	18 (28)	Microcompartments in yeast, Merzendorfer and Heinisch in Biol. Chem. 2013; Q2
74	17 (31)	Is there anyone out there? Review on AFM & sensors in Integr. Biol. 2010; Q4
75	17 (23)	DdPFK, Estévez <i>et al.</i> in FEBS Lett. 1995; Q3
76	16 (18)	Hanseniaspora uvarum genetics, Langenberg <i>et al.</i> in AEM 2017; Q1
77	16 (17)	KIBCK1, Jacoby <i>et al.</i> in J. Mol. Biol. 1999; Q1
78	15 (18)	Drosophila neprilysins control insulin signaling, Hallier <i>et al.</i> in eLife 2016; Q1
79	15 (18)	Dck1/Lmo1/Rho5 Schmitz <i>et al.</i> in Mol Microbiol. 2015; Q2
80	15 (21)	Triple shuttle vectors for neurons, Bakota <i>et al.</i> in Mol. Genet. Genom. 2012; Q3
81	15 (21)	ICL2, with Rosaura Rodicio in Yeast 1996; Q2
82	14 (17)	KIROM2, Lorberg <i>et al.</i> in Yeast 2003; Q2
83	14 (17)	GPM1 sequence in Curr. Genet. 1991; Q2
84	13 (13)	Differential control of KIICL1, Rodicio <i>et al.</i> in FEBS Lett. 2008; Q3
85	13 (23)	A laboratory strain for spirit production, Schehl <i>et al.</i> in Yeast 2007; Q2
86	13 (18)	CaPFK paper, Lorberg <i>et al.</i> in Eur. J. Biochem. 1999; Q2
87	13 (19)	Heterologous PFK expression in yeast in FEBS Lett. 1993; Q3
88	12 (24)	AFM and disulfide bridges in Wsc sensors; Dupres <i>et al.</i> in Langmuir 2011; Q2
89	12 (14)	Antifungal drug target screens in Exp.Opin. 2008; Q1
90	11 (10)	The small yeast GTPase Rho5 ...; Schmitz <i>et al.</i> IJMS 2018; Q1
91	11 (17)	bHLH in <i>Drosophila</i> Toegel <i>et al.</i> in Developm. Biol. 2013; Q2
92	11 (15)	Rom2 PH domain, Lorberg <i>et al.</i> in Mol. Genet. Genom. 2001; Q3
93	11 (12)	A single point mutation ... PFK stability Kirchberger <i>et al.</i> in Biochem. J. 1999; Q2
94	11 (21)	MERRF mutation in mitochondrial DNA, Wang <i>et al.</i> Amer.J.Hematol. 1999; Q1
95	10 (12)	Triple shuttle vectors <i>Drosophila</i> , Paululat and Heinisch in Gene 2012; Q2
96	9 (15)	Milk and sugar, Review Backhaus <i>et al.</i> in Eur. J. Cell Biol. 2011; Q3
97	9 (11)	Bypass to yeast PFK; Review Heinisch & Zimmermann in Yeast 1985; Q2
98	7 (9)	Heterologous G6PD gene expression; with Renate Scheibe in Microorg. 2020; Q2
99	7 (12)	Distinct domains in Lonely Heart; Rothstein <i>et al.</i> JBC 2018; Q2
100	7 (4)	Lack of the NAD ... KIGpd1-Paper; Mojardin <i>et al.</i> in Fungal Genet. Biol. 2018; Q2

101	7 (8)	CWI/SNF1/Mig1 in <i>K. lactis</i> Rippert <i>et al.</i> in Eur. J. Cell Biol. 2017; Q3
102	7 (26)	Triticale beer, Glatthar <i>et al.</i> in J. Amer. Soc. Brew. Chem. 2002; Q4
103	7 (7)	Crystallization and X-ray of yeast PFK, Obmolova <i>et al.</i> in Acta Crystall. 1998; Q1
104	6 (6)	Uptake of exogenous serine and sphingolipids; Esch <i>et al.</i> 2020 in PLOS Genet. ; Q1
105	6 (8)	A novel role for neprilysins, Panz <i>et al.</i> in Biol. Cell 2012; Q2
106	6 (8)	Analysis of <i>K.lactis</i> TKL1 Jacoby <i>et al.</i> in Curr. Genet. 1997; Q2
107	5 (9)	The pentose phosphate pathway in yeasts; Bertels <i>et al.</i> in Biomolecules 2021; Q2
108	4 (8)	A three-dimensional model of yeast Wsc1; Voskoboinikova <i>et al.</i> 2021; JOF; Q1
109	4 (5)	Identification of nucleoside analogs, Raasch <i>et al.</i> Chem. Biol. Drug Design 2015; Q3
110	4 (5)	C-terminal modification of yeast PFK; Edelmann <i>et al.</i> in BBRC 2002; Q3
111	3 (3)	Fungal homologues of human Rac1; Hühn <i>et al.</i> in Interntl. Microbiol. 2020; Q3
112	3	Broad-spectrum cephalosporins; Oviano <i>et al.</i> in Microorganisms 2019; Q2
113	3 (4)	Investigation of <i>K. lactis</i> septins; Rippert <i>et al.</i> in Fungal Genet. Biol. 2016; Q2
114	3 (3)	Regulation of cytokinesis in <i>K. lactis</i> ; Rippert <i>et al.</i> in BBA-MCR 2014; Q2
115	2 (4)	A trimeric Rab7 GEF complex; Dehnen <i>et al.</i> in J. Cell Sci. 2020, Q2
116	2	How to study intertwined signaling; Commentary FEBS J. 2020; Q2
117	2 (2)	Analysis of functional domains in Rho5; Sterk <i>et al.</i> in IJMS 2019; Q1
118	2 (3)	Improved split-ubiquitin screening Ivanusic <i>et al.</i> in Biotechn. 2015; Q4
119	2 (4)	A hybrid DNA 2μm sequence; Rodicio <i>et al.</i> in Mol. Gen. Genet. 1984; Q2
120	1	Genetics and physiology of KIFba1 and KITdhs; Rodicio <i>et al.</i> in IJMS 2022; Q1
121	1	The small GTPase KIRho5; Musielak <i>et al.</i> , in J. Cell Sci. 2020; Q2
122	1	Genomic analysis of IncC plasmid; Vazquez <i>et al.</i> , in Sci. Rep. 2021; Q1
123	1 (1)	Interaction of mammalian and plant sucrose transporters; Vitavska <i>et al.</i> 2018; Q2
124	0	Caspase-cleaved tau is senescence-associated; Conze <i>et al.</i> in Mol. Psych. 2022; Q1
125	0	Yeast mail NSA paper, Rosemeyer <i>et al.</i> in Chem. Biodiv. 2014; Q4
126	(25)	Yeast Book review Heinisch and Hollenberg 1993
127	(13)	PFK Kopperschläger and Heinisch Book chapter in Yeast Sugar Metab. 1997
128	(6)	Glycolytic enzymes Heinisch and Rodicio Book chapter in Yeast Sugar Metab. 1997
129	(8, 12)	König-book: Stress responses in wine yeast 2009, 2017
130	(25, 11)	König-book: Carbohydrate metabolism in wine yeast 2009, 2017
131	(9)	Aneuploidy tests in D61.M with Zimmermann 1985