

17. R. D. Palmiter, S. D. Findley, *EMBO J.* **1995**, *14*, 639–649.
18. K. M. Taylor, R. I. Nicholson, *Biochim. Biophys. Acta* **2003**, *1611*, 16–30.
19. K. M. Taylor, H. E. Morgan, A. Johnson, R. I. Nicholson, *Biochem. J.* **2004**, *377*, 131–139.
20. K. M. Taylor, P. Vichova, N. Jordan, S. Hiscox, R. Hendley, R. I. Nicholson, *Endocrinology* **2008**, *149*, 4912–4920.
21. T. Fukada, N. Civic, T. Furuichi, S. Shimoda, K. Mishima, H. Higashiyama, Y. Idaira, Y. Asada, H. Kitamura, S. Yamasaki, S. Hojyo, M. Nakayama, O. Ohara, H. Koseki, H. G. Dos Santos, L. Bonafe, R. Ha-Vinh, A. Zankl, S. Unger, M. E. Kraenzlin, J. S. Beckmann, I. Saito, C. Rivolta, S. Ikegawa, A. Superti-Furga, T. Hirano, *PLoS One* **2008**, *3*, e3642.
22. R. A. Colvin, W. R. Holmes, C. P. Fontaine, W. Maret, *Metallomics* **2010**, *2*, 306–317.
23. R. A. Colvin, A. I. Bush, I. Volitakis, C. P. Fontaine, D. Thomas, K. Kikuchi, W. R. Holmes, *Am. J. Physiol. Cell Physiol.* **2008**, *294*, C726–742.
24. B. L. Vallee, K. H. Falchuk, *Physiol. Rev.* **1993**, *73*, 79–118.
25. A. Passerini, C. Andreini, S. Menchetti, A. Rosato, P. Frasconi, *BMC Bioinformatics* **2007**, *8*, 39.
26. H. Haase, W. Maret, *Biometals* **2005**, *18*, 333–338.
27. I. Lengyel, S. Fieuw-Makaroff, A. L. Hall, A. T. Sim, J. A. Rostas, P. R. Dunkley, *J. Neurochem.* **2000**, *75*, 594–605.
28. D. K. Perry, M. J. Smyth, H. R. Stennicke, G. S. Salvesen, P. Duriez, G. G. Poirier, Y. A. Hannun, *J. Biol. Chem.* **1997**, *272*, 18530–18533.
29. L. M. Plum, L. Rink, H. Haase, *Int. J. Environ. Res. Public Health* **2010**, *7*, 1342–1365.
30. A. S. Prasad, *Met. Ions Biol. Syst.* **2004**, *41*, 103–137.
31. J. E. Cummings, J. P. Kovacic, *J. Vet. Emerg. Crit. Care (San Antonio)* **2009**, *19*, 215–240.
32. P. J. Fraker, *J. Nutr.* **2005**, *135*, 359–362.
33. J. M. Knowlden, I. R. Hutcheson, D. Barrow, J. M. Gee, R. I. Nicholson, *Endocrinology* **2005**, *146*, 4609–4618.
34. K. M. Taylor, H. E. Morgan, K. Smart, N. M. Zahari, S. Pumford, I. O. Ellis, J. F. Robertson, R. I. Nicholson, *Mol. Med.* **2007**, *13*, 396–406.
35. J. A. Halsted, A. S. Prasad, *Isr. Med. J.* **1963**, *22*, 307–315.
36. K. H. Brown, J. M. Peerson, J. Rivera, L. H. Allen, *Am. J. Clin. Nutr.* **2002**, *75*, 1062–1071.
37. S. L. Sensi, P. Paoletti, A. I. Bush, I. Sekler, *Nat. Rev. Neurosci.* **2009**, *10*, 780–791.
38. J. Buntzel, F. Bruns, M. Glatzel, A. Garayev, R. Mucke, K. Kisters, U. Schafer, K. Schonekaes, O. Micke, *Anticancer Res.* **2007**, *27*, 1941–1943.
39. M. Kratochvilova, M. Raudenska, Z. Heger, L. Richtera, N. Cernei, V. Adam, P. Babula, M. Novakova, M. Masarik, J. Gumulec, *Prostate* **2017**.
40. N. Sattar, H. R. Scott, D. C. McMillan, D. Talwar, D. S. O'Reilly, G. S. Fell, *Nutr. Cancer* **1997**, *28*, 308–312.
41. A. Boz, O. Evliyaoglu, M. Yildirim, N. Erkan, B. Karaca, *Turk. J. Gastroenterol.* **2005**, *16*, 81–84.
42. M. Stepien, D. J. Hughes, S. Hybsier, C. Bamia, A. Tjonneland, K. Overvad, A. Affret, M. His, M. C. Boutron-Ruault, V. Katzke, T. Kuhn, K. Aleksandrova, A. Trichopoulou, P. Lagiou, P. Orfanos, D. Palli, S. Sieri, R. Tumino, F. Ricceri, S. Panico, H. B. Bueno-de-Mesquita, P. H. Peeters, E. Weiderpass, C. Lasheras, C. Bonet Bonet, E. Molina-Portillo, M. Dorronsoro, J. M. Huerta, A. Barricarte, B. Ohlsson, K. Sjoberg, M. Werner, D. Shungin, N. Wareham, K. T. Khaw, R. C. Travis, H. Freisling, A. J. Cross, L. Schomburg, M. Jenab, *Br. J. Cancer* **2017**, *116*, 688–696.
43. S. K. Gupta, S. P. Singh, V. K. Shukla, *J. Surg. Oncol.* **2005**, *91*, 204–208.

44. M. S. Naidu, A. N. Suryakar, S. C. Swami, R. V. Katkam, K. M. Kumbar, *Indian J. Clin. Biochem.* **2007**, *22*, 140–144.
45. H. Cunzhi, J. Jiexian, Z. Xianwen, G. Jingang, Z. Shumin, D. Lili, *Biol. Trace Elem. Res.* **2003**, *94*, 113–122.
46. S. A. Navarro Silvera, T. E. Rohan, *Cancer Causes Control* **2007**, *18*, 7–27.
47. A. U. Memon, T. G. Kazi, H. I. Afridi, M. K. Jamali, M. B. Arain, N. Jalbani, N. Syed, *Clin. Chim. Acta* **2007**, *379*, 66–70.
48. L. Piccinini, P. Borella, A. Bargellini, C. I. Medici, A. Zoboli, *Biol. Trace Elem. Res.* **1996**, *51*, 23–30.
49. M. J. Farquharson, A. Al-Ebraheem, K. Geraki, R. Leek, A. Jubba, A. L. Harris, *Physics in Medicine and Biology* **2009**, *54*, 4213–4223.
50. I. Yucel, F. Arpaci, A. Ozet, B. Doner, T. Karayilanoglu, A. Sayar, O. Berk, *Biol. Trace Elem. Res.* **1994**, *40*, 31–38.
51. S. K. Gupta, V. K. Shukla, M. P. Vaidya, S. K. Roy, S. Gupta, *J. Surg. Oncol.* **1991**, *46*, 178–181.
52. F. Cavallo, M. Gerber, E. Marubini, S. Richardson, A. Barbieri, A. Costa, A. DeCarli, H. Pujol, *Cancer* **1991**, *67*, 738–745.
53. A. S. Prasad, O. Kucuk, *Cancer Metastasis Rev.* **2002**, *21*, 291–295.
54. E. J. Margalioth, J. G. Schenker, M. Chevion, *Cancer* **1983**, *52*, 868–872.
55. R. Jin, B. Bay, P. Tan, B. K. Tan, *Oncol. Rep.* **1999**, *6*, 871–875.
56. P. M. Santoliquido, H. W. Southwick, J. H. Olwin, *Surg. Gynecol. Obstet.* **1976**, *142*, 65–70.
57. Y. Cui, S. Vogt, N. Olson, A. G. Glass, T. E. Rohan, *Cancer Epidemiol. Biomarkers Prev.* **2007**, *16*, 1682–1685.
58. D. Riesop, A. V. Hirner, P. Rusch, A. Bankfalvi, *J. Cancer Res. Clin. Oncol.* **2015**, *141*, 1321–1331.
59. W. Woo, Z. Xu, *Biol. Trace Elem. Res.* **2002**, *87*, 157–169.
60. J. M. Knowlden, I. R. Hutcheson, H. E. Jones, T. Madden, J. M. Gee, M. E. Harper, D. Barrow, A. E. Wakeling, R. I. Nicholson, *Endocrinology* **2003**, *144*, 1032–1044.
61. K. Yoshida, N. Kawano, M. Yoshiike, M. Yoshida, T. Iwamoto, M. Morisawa, *Mol. Hum. Reprod.* **2008**, *14*, 151–156.
62. V. Zaichick, T. V. Sviridova, S. V. Zaichick, *Int. Urol. Nephrol.* **1997**, *29*, 565–574.
63. L. C. Costello, R. B. Franklin, P. Feng, M. Tan, O. Bagasra, *Cancer Causes Control* **2005**, *16*, 901–915.
64. T. Goel, S. N. Sankhwar, *Scand. J. Urol. Nephrol.* **2006**, *40*, 108–112.
65. P. Feng, T. L. Li, Z. X. Guan, R. B. Franklin, L. C. Costello, *Prostate* **2002**, *52*, 311–318.
66. P. Feng, T. Li, Z. Guan, R. B. Franklin, L. C. Costello, *Mol. Cancer* **2008**, *7*, 25.
67. A. R. Kristal, J. L. Stanford, J. H. Cohen, K. Wicklund, R. E. Patterson, *Cancer Epidemiol. Biomarkers & Prevention* **1999**, *8*, 887–892.
68. M. F. Leitzmann, *J. Natl. Cancer Inst.* **2003**, *95*, 1004–1007.
69. E. T. Chang, M. Hedelin, H. O. Adami, H. Gronberg, K. A. Balter, *J. Natl. Cancer Inst.* **2004**, *96*, 1108; author reply 1108–1109.
70. A. S. Prasad, F. W. Beck, D. C. Snell, O. Kucuk, *Nutr. Cancer* **2009**, *61*, 879–887.
71. D. K. Dhawan, V. D. Chadha, *Indian J. Med. Res.* **2010**, *132*, 676–682.
72. E. Ho, *J. Nutr. Biochem.* **2004**, *15*, 572–578.
73. M. T. Leccia, M. J. Richard, A. Favier, J. C. Beani, *Biol. Trace Elem. Res.* **1999**, *69*, 177–190.
74. E. Ho, B. N. Ames, *Proc. Natl. Acad. Sci. USA* **2002**, *99*, 16770–16775.
75. M. Satoh, Y. Kondo, M. Mita, I. Nakagawa, A. Naganuma, N. Imura, *Cancer Res.* **1993**, *53*, 4767–4768.
76. V. Dani, A. Goel, K. Vaiphei, D. K. Dhawan, *Toxicol. Lett.* **2007**, *171*, 10–18.

REFERENCES

1. C. J. Frederickson, J. Y. Koh, A. I. Bush, *Nat. Rev. Neurosci.* **2005**, *6*, 449–462.
2. W. Maret, *Biometals* **2011**, *24*, 411–418.
3. A. S. Prasad, D. Oberleas, *J. Lab. Clin. Med.* **1974**, *83*, 634–639.
4. E. John, T. C. Laskow, W. J. Buchser, B. R. Pitt, P. H. Basse, L. H. Butterfield, P. Kalinski, M. T. Lotze, *J. Transl. Med.* **2010**, *8*, 118.
5. F. Y. Wu, W. J. Huang, R. B. Sinclair, L. Powers, *J. Biol. Chem.* **1992**, *267*, 25560–25567.
6. B. L. Vallee, D. S. Auld, *EXS* **1995**, *73*, 259–277.
7. H. Haase, W. Maret, *Exp. Cell Res.* **2003**, *291*, 289–298.
8. T. Hirano, M. Murakami, T. Fukada, K. Nishida, S. Yamasaki, T. Suzuki, *Adv. Immunol.* **2008**, *97*, 149–176.
9. H. Haase, L. Rink, *Annu. Rev. Nutr.* **2009**, *29*, 133–152.
10. S. Yamasaki, K. Sakata-Sogawa, A. Hasegawa, T. Suzuki, K. Kabu, E. Sato, T. Kurosaki, S. Yamashita, M. Tokunaga, K. Nishida, T. Hirano, *J. Cell Biol.* **2007**, *177*, 637–645.
11. T. Kambe, T. Tsuji, A. Hashimoto, N. Itsumura, *Physiol. Rev.* **2015**, *95*, 749–784.
12. L. A. Lichten, R. J. Cousins, *Annu. Rev. Nutr.* **2009**, *29*, 153–176.
13. T. Fukada, T. Kambe, *Metallomics* **2011**, *3*, 662–674.
14. E. Ohana, E. Hoch, C. Keasar, T. Kambe, O. Yifrach, M. Hershfinkel, I. Sekler, *J. Biol. Chem.* **2009**, *284*, 17677–17686.
15. L. Huang, S. Tepaamorndech, *Mol. Aspects Med.* **2013**, *34*, 548–560.
16. M. Seve, F. Chimienti, S. Devergnas, A. Favier, *BMC Genomics* **2004**, *5*, 32.

77. L. Y. Fong, V. T. Nguyen, J. L. Farber, *J. Natl. Cancer Inst.* **2001**, *93*, 1525–1533.
78. D. L. Manning, R. A. McClelland, J. M. Gee, C. M. Chan, C. D. Green, R. W. Blamey, R. I. Nicholson, *Eur. J. Cancer* **1993**, *29A*, 1462–1468.
79. D. L. Manning, J. F. Robertson, I. O. Ellis, C. W. Elston, R. A. McClelland, J. M. Gee, R. J. Jones, C. D. Green, P. Cannon, R. W. Blamey, R. I. Nicholson, *Eur. J. Cancer* **1994**, *30A*, 675–678.
80. C. M. Perou, T. Sorlie, M. B. Eisen, M. van de Rijn, S. S. Jeffrey, C. A. Rees, J. R. Pollack, D. T. Ross, H. Johnsen, L. A. Akslen, O. Fluge, A. Pergamenschikov, C. Williams, S. X. Zhu, P. E. Lonning, A. L. Borresen-Dale, P. O. Brown, D. Botstein, *Nature* **2000**, *406*, 747–752.
81. S. Tozlu, I. Girault, S. Vacher, J. Vendrell, C. Andrieu, F. Spyrtos, P. Cohen, R. Lidereau, I. Bieche, *Endocr. Relat. Cancer* **2006**, *13*, 1109–1120.
82. C. Hogstrand, P. Kille, M. L. Ackland, S. Hiscox, K. M. Taylor, *Biochem. J.* **2013**, *455*, 229–237.
83. J. Unno, K. Satoh, M. Hirota, A. Kanno, S. Hamada, H. Ito, A. Masamune, N. Tsukamoto, F. Motoi, S. Egawa, M. Unno, A. Horii, T. Shimosegawa, *Int. J. Oncol.* **2009**, *35*, 813–821.
84. K. M. Taylor, I. A. Muraina, D. Brethour, G. Schmitt-Ulms, T. Nimmanon, S. Ziliotto, P. Kille, C. Hogstrand, *Biochem. J.* **2016**, *473*, 2531–2544.
85. N. Kagara, N. Tanaka, S. Noguchi, T. Hirano, *Cancer Sci.* **2007**, *98*, 692–697.
86. D. Pal, U. Sharma, S. K. Singh, R. Prasad, *Gene* **2014**, *552*, 195–198.
87. M. Li, Y. Zhang, U. Bharadwaj, Q. J. Zhai, C. H. Ahern, W. E. Fisher, F. C. Brunicardi, C. D. Logsdon, C. Chen, Q. Yao, *Clin. Cancer Res.* **2009**, *15*, 5993–6001.
88. B. P. Weaver, Y. Zhang, S. Hiscox, G. L. Guo, U. Apte, K. M. Taylor, C. T. Sheline, L. Wang, G. K. Andrews, *PLoS One* **2010**, *5*.
89. C. Xu, M. B. Wallace, J. Yang, L. Jiang, Q. Zhai, Y. Zhang, C. Hong, Y. Chen, T. S. Frank, J. A. Stauffer, H. J. Asbun, M. Raimondo, T. A. Woodward, Z. Li, S. Guha, L. Zheng, M. Li, *Curr. Mol. Med.* **2014**, *14*, 309–315.
90. R. B. Franklin, B. A. Levy, J. Zou, N. Hanna, M. M. Desouki, O. Bagasra, L. A. Johnson, L. C. Costello, *J. Gastrointest. Cancer* **2012**, *43*, 249–257.
91. K. Thorsen, F. Mansilla, T. Schepeler, B. Oster, M. H. Rasmussen, L. Dyrskjot, R. Karni, M. Akerman, A. R. Krainer, S. Laurberg, C. L. Andersen, T. F. Orntoft, *Mol. Cell Proteomics* **2011**, *10*, M110 002998.
92. A. Sveen, A. C. Bakken, T. H. Agesen, G. E. Lind, A. Nesbakken, O. Nordgard, S. Brackmann, T. O. Rognum, R. A. Lothe, R. I. Skotheim, *Int. J. Cancer* **2012**, *131*, 1479–1485.
93. L. C. Costello, R. B. Franklin, *Mol. Cancer* **2006**, *5*, 17.
94. K. Golovine, P. Makhov, R. G. Uzzo, T. Shaw, D. Kunkle, V. M. Kolenko, *Clin. Cancer Res.* **2008**, *14*, 5376–5384.
95. L. C. Costello, J. Zou, M. M. Desouki, R. B. Franklin, *J. Gastrointest. Cancer* **2012**, *43*, 570–578.
96. E. Bellomo, A. Massarotti, C. Hogstrand, W. Maret, *Metallomics* **2014**, *6*, 1229–1239.
97. E. Bellomo, K. Birla Singh, A. Massarotti, C. Hogstrand, W. Maret, *Coord. Chem. Rev.* **2016**, *327–328*, 70–83.
98. K. M. Taylor, S. Hiscox, R. I. Nicholson, C. Hogstrand, P. Kille, *Sci. Signal* **2012**, *5*, ra11.
99. S. Tawfic, S. Yu, H. Wang, R. Faust, A. Davis, K. Ahmed, *Histol. Histopathol.* **2001**, *16*, 573–582.
100. S. Hiscox, L. Morgan, D. Barrow, C. Dutkowskil, A. Wakeling, R. I. Nicholson, *Clin. Exp. Metastasis* **2004**, *21*, 201–212.

101. H. E. Jones, L. Goddard, J. M. Gee, S. Hiscox, M. Rubini, D. Barrow, J. M. Knowlden, S. Williams, A. E. Wakeling, R. I. Nicholson, *Endocr. Relat. Cancer* **2004**, *11*, 793–814.
102. S. Hiscox, L. Morgan, T. P. Green, D. Barrow, J. Gee, R. I. Nicholson, *Breast Cancer Res. Treat.* **2006**, *97*, 263–274.
103. J. M. Summy, G. E. Gallick, *Clin. Cancer Res.* **2006**, *12*, 1398–1401.
104. A. Ring, M. Dowsett, *Endocr. Relat. Cancer* **2004**, *11*, 643–658.
105. C. W. Yde, T. Frogne, A. E. Lykkesfeldt, I. Fichtner, O. G. Issinger, J. Stenvang, *Cancer Lett.* **2007**, *256*, 229–237.
106. S. B. Pakala, S. K. Rayala, R. A. Wang, K. Ohshiro, P. Mudvari, S. D. Reddy, Y. Zheng, R. Pires, S. Casimiro, M. R. Pillai, L. Costa, R. Kumar, *Cancer Res.* **2013**, *73*, 3761–3770.
107. K. M. Taylor, S. Hiscox, R. I. Nicholson, *Trends Endocrinol. Metab.* **2004**, *15*, 461–463.
108. R. Ilouz, O. Kaidanovich, D. Gurwitz, H. Eldar-Finkelman, *Biochem. Biophys. Res. Commun.* **2002**, *295*, 102–106.
109. S. Lee, G. Chanoit, R. McIntosh, D. A. Zvara, Z. Xu, *Am. J. Physiol. Heart Circulat. Physiol.* **2009**, *297*, H569–575.
110. X. Tang, N. F. Shay, *J. Nutr.* **2001**, *131*, 1414–1420.
111. H. Peinado, D. Olmeda, A. Cano, *Nat. Rev. Cancer* **2007**, *7*, 415–428.
112. B. P. Zhou, J. Deng, W. Xia, J. Xu, Y. M. Li, M. Gunduz, M. C. Hung, *Nature Cell Biol.* **2004**, *6*, 931–940.
113. S. Yamashita, C. Miyagi, T. Fukada, N. Kagara, Y. S. Che, T. Hirano, *Nature* **2004**, *429*, 298–302.
114. R. Shen, F. Xie, H. Shen, Q. liu, T. Zheng, X. Kou, D. Wang, J. Yang, *PLoS One* **2013**, *8*, e56542.
115. K. M. Taylor, R. I. Nicholson, *Biochim. Biophys. Acta - Biomembranes* **2003**, *1611*, 16–30.
116. Y. Zhang, U. Bharadwaj, C. D. Logsdon, C. Chen, Q. Yao, M. Li, *Clin. Cancer Res.* **2010**, *16*, 1423–1430.
117. C. Hogstrand, P. Kille, R. I. Nicholson, K. M. Taylor, *Trends Mol. Med.* **2009**, *15*, 101–111.
118. K. M. Taylor, P. Kille, C. Hogstrand, *Cell Cycle* **2012**, *11*, 1863–1864.
119. T. Nimmanon, S. Ziliotto, S. Morris, L. Flanagan, K. M. Taylor, *Metallomics* **2017**.
120. K. Niefind, J. Raaf, O. G. Issinger, *Cell Mol. Life Sci.* **2009**, *66*, 1800–1816.
121. N. A. St-Denis, D. W. Litchfield, *Cell Mol. Life Sci.* **2009**, *66*, 1817–1829.
122. A. Siddiqui-Jain, D. Drygin, N. Streiner, P. Chua, F. Pierre, S. E. O'Brien, J. Bliesath, M. Omori, N. Huser, C. Ho, C. Proffitt, M. K. Schwaebe, D. M. Ryckman, W. G. Rice, K. Anderes, *Cancer Res.* **2010**, *70*, 10288–10298.
123. L. R. Martins, P. Lucio, A. Melao, I. Antunes, B. A. Cardoso, R. Stansfield, M. T. Bertilaccio, P. Ghia, D. Drygin, M. G. Silva, J. T. Barata, *Leukemia* **2014**, *28*, 179–182.
124. Y. Zheng, B. C. McFarland, D. Drygin, H. Yu, S. L. Bellis, H. Kim, M. Bredel, E. N. Benveniste, *Clin. Cancer Res.* **2013**, *19*, 6484–6494.
125. J. K. Chesters, L. Petrie, *J. Nutr. Biochem.* **1999**, *10*, 279–290.
126. D. Sussman, L. M. Smith, M. E. Anderson, S. Duniho, J. H. Hunter, H. Kostner, J. B. Miyamoto, A. Nesterova, L. Westendorf, H. A. Van Epps, N. Whiting, D. R. Benjamin, *Mol. Cancer Ther.* **2014**, *13*, 2991–3000.
127. T. Zhang, D. Sui, J. Hu, *Nat. Commun.* **2016**, *7*, 11979.
128. A. Dereeper, V. Guignon, G. Blanc, S. Audic, S. Buffet, F. Chevenet, J. F. Dufayard, S. Guindon, V. Lefort, M. Lescot, J. M. Claverie, O. Gascuel, *Nucl. Acids Res.* **2008**, *36*, W465–469.

129. W. Li, A. Cowley, M. Uludag, T. Gur, H. McWilliam, S. Squizzato, Y. M. Park, N. Buso, R. Lopez, *Nucl. Acids Res.* **2015**, *43*, W580–584.

Subject Index

A

AAV for gene delivery technology
 Acetaminophen
 N-Acetylserine (NAC) 113
 Acetylation of DNA by Aspirin
 Acetylation of DNA
 Acetylation of DNA
 Acetylation of DNA
 Acetylation of DNA
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