

## References

1. Squire LR, Zola-Morgan S. 1991. *Science* 253: 1380-6
2. Yamauchi T. 2002. *Mass Spectrom Rev* 21: 266-86
3. Cho KO, Hunt CA, Kennedy MB. 1992. *Neuron* 9: 929-42
4. McGee AW, Topinka JR, Hashimoto K, Petralia RS, Kakizawa S, et al. 2001. *Journal of Neuroscience* 21: 3085-91
5. Muller BM, Kistner U, Veh RW, Cases-Langhoff C, Becker B, et al. 1995. *J Neurosci* 15: 2354-66
6. Muller BM, Kistner U, Kindler S, Chung WK, Kuhlendahl S, et al. 1996. *Neuron* 17: 255-65
7. Monyer H, Burnashev N, Laurie DJ, Sakmann B, Seeburg PH. 1994. *Neuron* 12: 529-40
8. Monyer H, Sprengel R, Schoepfer R, Herb A, Higuchi M, et al. 1992. *Science* 256: 1217-21
9. Forrest D, Yuzaki M, Soares HD, Ng L, Luk DC, et al. 1994. *Neuron* 13: 325-38
10. Wenthold RJ, Prybylowski K, Standley S, Sans N, Petralia RS. 2003. *Annu Rev Pharmacol Toxicol* 43: 335-58
11. Nicoll RA, Tomita S, Bredt DS. 2006. *Science* 311: 1253-6
12. Hollmann M, Heinemann S. 1994. *Annu Rev Neurosci* 17: 31-108
13. Malinow R, Malenka RC. 2002. *Annu Rev Neurosci* 25: 103-26
14. Wenthold RJ, Petralia RS, Blahos J, II, Niedzielski AS. 1996. *J Neurosci* 16: 1982-9
15. Jia Z, Agopyan N, Miu P, Xiong Z, Henderson J, et al. 1996. *Neuron* 17: 945-56
16. Zamanillo D, Sprengel R, Hvalby O, Jensen V, Burnashev N, et al. 1999. *Science* 284: 1805-11
17. Funke L, Dakoji S, Bredt DS. 2005. *Annu Rev Biochem* 74: 219-45

18. Woods DF, Bryant PJ. 1991. *Cell* 66: 451-64
19. Olsen O, Bredt DS. 2003. *J Biol Chem* 278: 6873-8
20. DATABASE S. 2007. <http://smart.embl-heidelberg.de>.
21. Craven SE, Bredt DS. 1998. *Cell* 93: 495-8
22. Garner CC, Nash J, Huganir RL. 2000. *Trends in Cell Biology* 10: 274-80
23. Kornau H-C, Seeburg PH, Kennedy MB. 1997. *Current Opinions in Neurobiology* 7: 368-73
24. Sheng M, Sala C. 2001. *Annu. Rev. Neurosci.* 24: 1-29
25. Kim E, Niethammer M, Rothschild A, N. JY, Sheng M. 1995. *Nature* 378: 85-8
26. Kornau H-C, Schenker LT, Kennedy MB, Seeburg PH. 1995. *Science* 269: 1737-40
27. Marfatia SM, Byron O, Campbell G, Liu SC, Chishti AH. 2000. *Journal of Biological Chemistry* 275: 13759-70
28. Marfatia SM, Morais-Cabral JH, Kim AC, Byron O, Chishti AH. 1997. *J Biol Chem* 272: 24191-7
29. Hsueh YP, Wang TF, Yang FC, Sheng M. 2000. *Nature* 404: 298-302
30. Jo K, Derin R, Li M, Bredt DS. 1999. *Journal of Neuroscience* 19: 4189-99
31. McGee AW, Dakoji SR, Olsen O, Bredt DS, Lim WA, Prehoda KE. 2001. *Mol Cell* 8: 1291-301.
32. Takeuchi M, Hata Y, Hirao K, Toyoda A, Irie M, Takai Y. 1997. *Journal of Biological Chemistry* 272: 11943-51
33. Kim E, Naisbitt S, Hsueh YP, Rao A, Rothschild A, et al. 1997. *J Cell Biol* 136: 669-78
34. Brenman JE, Topinka JR, Cooper EC, McGee AW, Rosen J, et al. 1998. *Journal of Neuroscience* 18: 8805-13
35. Chetkovich DM, Bunn RC, Kuo SH, Kawasaki Y, Kohwi M, Bredt DS. 2002. *J Neurosci* 22: 6415-25.
36. McLaughlin S, Wang J, Gambhir A, Murray D. 2002. *Annu Rev Biophys Biomol Struct* 31: 151-75

37. Hanada T, Lin L, Chandy KG, Oh SS, Chishti AH. 1997. *J Biol Chem* 272: 26899-904
38. Lue RA, Marfatia SM, Branton D, Chishti AH. 1994. *Proc Natl Acad Sci U S A* 91: 9818-22
39. Lue RA, Brandin E, Chan EP, Branton D. 1996. *Journal of Cell Biology* 135: 1125-37
40. Doerks T, Bork P, Kamberov E, Makarova O, Muecke S, Margolis B. 2000. *Trends in Biochemical Sciences* 25: 317-8
41. Feng W, Long JF, Fan JS, Suetake T, Zhang M. 2004. *Nat Struct Mol Biol* 11: 475-80
42. Schluter OM, Xu W, Malenka RC. 2006. *Neuron* 51: 99-111
43. Brenman JE, Christopherson KS, Craven SE, McGee AW, Brecht DS. 1996. *Journal of Neuroscience* 16: 7407-15
44. Dunphy JT, Linder ME. 1998. *Biochimica et Biophysica Acta* 1436: 245-61
45. Resh MD. 1999. *Biochimica et Biophysica Acta* 1451: 1-16
46. El-Husseini Ael D, Brecht DS. 2002. *Nat Rev Neurosci* 3: 791-802
47. Smotryz JE, Linder ME. 2004. *Annu Rev Biochem* 73: 559-87
48. Fukata M, Fukata Y, Adesnik H, Nicoll RA, Brecht DS. 2004. *Neuron* 44: 987-96
49. Topinka JR, Brecht DS. 1998. *Neuron* 20: 125-34
50. Craven SE, Husseini AE, Brecht DS. 1999. *Neuron* 22: 497-509
51. El-Husseini AE, Craven SE, Chetkovich DM, Firestein BL, Schnell E, et al. 2000. *Journal of Cell Biology* 148: 159-72
52. Tiffany AM, Manganas LN, Kim E, Hsueh YP, Sheng M, Trimmer JS. 2000. *Journal of Cell Biology* 148: 147-58
53. Lahey T, Gorczyca M, Jia XX, Budnik V. 1994. *Neuron* 13: 823-35
54. Budnik V, Koh YH, Guan B, Hartmann B, Hough C, et al. 1996. *Neuron* 17: 627-40
55. Rao A, Kim E, Sheng M, Craig AM. 1998. *Journal of Neuroscience* 18: 1217-29

56. El-Husseini AE, Schnell E, Chetkovich DM, Nicoll RA, Brecht DS. 2000. *Science* 290: 1364-8
57. Scheiffele P, Fan J, Chioh J, Fetter R, Serafini T. 2000. *Cell* 101: 657-69
58. Futai K, Kim MJ, Hashikawa T, Scheiffele P, Sheng M, Hayashi Y. 2007. *Nat Neurosci* 10: 186-95
59. Migaud M, Charlesworth P, Dempster M, Webster LC, Watabe AM, et al. 1998. *Nature* 396: 433-9
60. Caruana G, Bernstein A. 2001. *Molecular and Cellular Biology* 21: 1475-83
61. Klocker N, Bunn RC, Schnell E, Caruana G, Bernstein A, et al. 2002. *Eur J Neurosci* 16: 1517-22
62. Bliss TV, Collingridge GL. 1993. *Nature* 361: 31-9.
63. Brenman JE, Chao DS, Gee SH, McGee AW, Craven SE, et al. 1996. *Cell* 84: 757-67
64. Chen H-J, Rojas-Soto M, Oguni A, Kennedy MB. 1998. *Neuron* 20: 895-904
65. Kim JH, Liao D, Lau L-F, Huganir RL. 1998. *Neuron* 20: 683-91
66. Nada S, Shima T, Yanai H, Husi H, Grant SG, et al. 2003. *J Biol Chem* 278: 47610-21
67. Grant SG, O'Dell TJ, Karl KA, Stein PL, Soriano P, Kandel ER. 1992. *Science* 258: 1903-10
68. Yagi T. 1999. *Biochem Pharmacol* 57: 845-50
69. Muller BM, Kistner U, Kindler S, Chung WJ, Kuhlendahl S, et al. 1996. *Neuron* 17: 255-65
70. Sans N, Wang PY, Du Q, Petralia RS, Wang YX, et al. 2005. *Nat Cell Biol* 7: 1179-90
71. Leonard AS, Davare MA, Horne MC, Garner CC, Hell JW. 1998. *Journal of Biological Chemistry* 273: 19518-24
72. Schnell E, Sizemore M, Karimzadegan S, Chen L, Brecht DS, Nicoll RA. 2002. *Proc Natl Acad Sci U S A* 99: 13902-7
73. Regalado MP, Terry-Lorenzo RT, Waites CL, Garner CC, Malenka RC. 2006. *J Neurosci* 26: 2343-57

74. Chen L, Chetkovich DM, Petralia RS, Sweeney NT, Kawasaki Y, et al. 2000. *Nature* 408: 936-43
75. Hashimoto K, Fukaya M, Qiao X, Sakimura K, Watanabe M, Kano M. 1999. *J Neurosci* 19: 6027-36
76. Tomita S, Chen L, Kawasaki Y, Petralia RS, Wenthold RJ, et al. 2003. *J Cell Biol* 161: 805-16
77. Tomita S, Nicoll RA, Brecht DS. 2001. *J Cell Biol* 153: F19-24
78. Bliss TV, Lomo T. 1973. *Journal of Physiology* 232: 331-56
79. Liao D, Hessler NA, Malinow R. 1995. *Nature* 375: 400-4
80. Isaac JT, Nicoll RA, Malenka RC. 1995. *Neuron* 15: 427-34
81. Stein V, House DR, Brecht DS, Nicoll RA. 2003. *J Neurosci* 23: 5503-6
82. Ehrlich I, Malinow R. 2004. *J Neurosci* 24: 916-27
83. Dudek SM, Bear MF. 1992. *Proc Natl Acad Sci U S A* 89: 4363-7
84. Beique JC, Andrade R. 2003. *J Physiol* 546: 859-67
85. El-Husseini AE, Schnell E, Dakoji S, Sweeney N, Zhou Q, et al. 2002. *Cell* 108: 849-63.
86. Colledge M, Snyder EM, Crozier RA, Soderling JA, Jin Y, et al. 2003. *Neuron* 40: 595-607
87. Dakoji S, Tomita S, Karimzadegan S, Nicoll RA, Brecht DS. 2003. *Neuropharmacology* 45: 849-56
88. Wyszynski M, Kim E, Dunah AW, Passafaro M, Valtschanoff JG, et al. 2002. *Neuron* 34: 39-52
89. Yao WD, Gainetdinov RR, Arbuckle MI, Sotnikova TD, Cyr M, et al. 2004. *Neuron* 41: 625-38
90. Stein V, House D, Brecht DS, Nicoll RA. 2003. *Journal of Neuroscience* (in press)
91. Nakagawa T, Futai K, Lashuel HA, Lo I, Okamoto K, et al. 2004. *Neuron* 44: 453-67
92. Chen X, Vinade L, Leapman RD, Petersen JD, Nakagawa T, et al. 2005. *Proc Natl Acad Sci U S A* 102: 11551-6

93. Nakagawa T, Cheng Y, Ramm E, Sheng M, Walz T. 2005. *Nature* 433: 545-9
94. Vandenberghe W, Nicoll RA, Bredt DS. 2005. *Proc Natl Acad Sci U S A* 102: 485-90
95. Sans N, Petralia RS, Wang YX, Blahos J, 2nd, Hell JW, Wenthold RJ. 2000. *J Neurosci* 20: 1260-71
96. Beique JC, Lin DT, Kang MG, Aizawa H, Takamiya K, Huganir RL. 2006. *Proc Natl Acad Sci U S A* 103: 19535-40
97. Lin Y, Jover-Mengual T, Wong J, Bennett MV, Zukin RS. 2006. *Proc Natl Acad Sci U S A* 103: 19902-7
98. Southern E. 1979. *Methods Enzymol* 68: 152-76
99. Firestein BL, Bredt DS. 1999. *Journal of Biological Chemistry* 274: 10545-50
100. Mullis K, Faloona F, Scharf S, Saiki R, Horn G, Erlich H. 1986. *Cold Spring Harb Symp Quant Biol* 51 Pt 1: 263-73
101. Laemmli UK. 1970. *Nature* 227: 680-5
102. Towbin H, Staehelin T, Gordon J. 1979. *Proc Natl Acad Sci U S A* 76: 4350-4
103. Tomita S, Stein V, Stocker TJ, Nicoll RA, Bredt DS. 2005. *Neuron* 45: 269-77
104. Luscher C, Nicoll RA, Malenka RC, Muller D. 2000. *Nat Neurosci* 3: 545-50