

Literature about the npi EggWorks & CellWorks Software

- ❑ Schoepfer, R., Föll, A. & Polder, H. R. (1996). ***EggWorks: A New Control Software for the Entire Experimental Setup***, in: Elsner, N. and H. U. Schnitzler, Göttingen Neurobiology Report 1996, Thieme Verlag Stuttgart.
- ❑ Schoepfer, R., Buchholz, G., Planck, J. & Polder, H. R. (2000). ***CellWorks: A Control Software for the Entire Experimental Setup***, in: R. Jamal (ed.) Virtual Instruments in Practice, Hüthig Verlag München.

Examples (TEC Recordings)

- ❑ Anson, L.C., Chen, P. E., Wyllie, D. J., Colquhoun, D., & Schoepfer, R. (1998). Identification of Amino Acid Residues of the NR2A Subunit That Control Glutamate Potency in Recombinant NR1/NR2A NMDA Receptors. *J. Neurosci.* **18**, 581-598.
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- ❑ Bo, X., Zhang, Y., Nassar, M., Burnstock, G., & Schoepfer, R. (1995). A P2X purinoreceptor cDNA conferring a novel pharmacological profile. *FEBS Lett.* **375**, 129-133.
- ❑ Chen, P. E., Johnston, A. R., Mok, M. H., Schoepfer, R., & Wyllie, D. J. (2004). Influence of a threonine residue in the S2 ligand binding domain in determining agonist potency and deactivation rate of recombinant NR1a/NR2D NMDA receptors. *J Physiol* **558**, 45-58.
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- ❑ Gu, Q., Du, H., Ma, C., Fotis, H., Wu, B., Huang, C., & Schwarz, W. (2009). Effects of alpha-Asarone on the Glutamate Transporter EAAC1 in Xenopus Oocytes. *Planta Med.*
- ❑ Hausmann, R., Rettinger, J., Gerevich, Z., Meis, S., Kassack, M. U., Illes, P., Lambrecht, G., & Schmalzing, G. (2006). The suramin analog 4,4',4",4'''-(carbonylbis(imino-5,1,3-benzenetriylbis(carboxylimino)))tetra-kis-benzenesulfonic acid (NF110) potently blocks P2X3 receptors: subtype selectivity is determined by location of sulfonic acid groups. *Molecular Pharmacology* **69**, 2058-2067.
- ❑ Krause, S. & Schwarz, W. (2005). Identification and Selective Inhibition of the Channel Mode of the Neuronal GABA Transporter 1. *Molecular Pharmacology* **68**, 1728-1735.
- ❑ Kuner, Th., Wollmuth, L. P., Karlin, A., Seeburg, P. H., & Sakmann, B. (1996). Structure of the NMDA Receptor Channel M2 Segment Inferred from the Accessibility of Substituted Cysteines. *Neuron*, **17**, 343-352.

- ❑ Kuner, Th. & Schoepfer, R. (1996). Multiple structural elements determine subunit-specificity of Mg^{2+} block in NMDA receptor channels. *J. Neuroscience*, **16**, 3549-3558.
- ❑ Kuner, Th., Beck, C. Sakmann, B. & Seeburg, P. H. (2001). Channel-Lining Residues of the AMPA Receptor M2 Segment: Structural Environment of the Q/R Site and Identification of the Selectivity Filter. *J. Neurosci.*, **21**, 4162–4172.
- ❑ Mertl, M., Daniel, H., & Kottra, G. (2008). Substrate-induced changes in the density of peptide transporter PEPT1 expressed in *Xenopus* oocytes. *Am.J.Physiol Cell Physiol.* **295**, C1332-C1343.
- ❑ Pertovaara, A., Ostergard, M., Anko, M. L., Lehti-Koivunen, S., Brandt, A., Hong, W., Korpi, E. R., & Panula, P. (2005). RFamide-related peptides signal through the neuropeptide FF receptor and regulate pain-related responses in the rat. *Neuroscience* **134**, 1023-1032.
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- ❑ Sinkkonen, S. T., Mansikkamaki, S., Moykkynen, T., Luddens, H., Uusi-Oukari, M., & Korpi, E. R. (2003). Receptor subtype-dependent positive and negative modulation of GABA(A) receptor function by niflumic acid, a nonsteroidal anti-inflammatory drug. *Mol Pharmacol.* **64**, 753-763.
- ❑ Springauf, A. & Grunder, S. (2010). An acid-sensing ion channel from shark (*Squalus acanthias*) mediates transient and sustained responses to protons. *J Physiol.* **588**, 809-820.

Examples (TEC Recordings with OTC-20)

- ❑ Babini, E., Paukert, M., Geisler, H. S., & Gründer, S. (2002). Alternative Splicing and Interaction with Di- and Polyvalent Cations Control the Dynamic Range of Acid-sensing Ion Channel 1 (ASIC1). *J.Biol.Chem.* **277**, 41597–41603.
- ❑ Chen, X., Kalbacher, H., & Grunder, S. (2006). Interaction of Acid-sensing Ion Channel (ASIC) 1 with the Tarantula Toxin Psalmotoxin 1 is State Dependent. *J Gen.Physiol.*
- ❑ Paukert, M., Hidayat, S., & Grunder, S. (2002). The P2X(7) receptor from *Xenopus laevis*: formation of a large pore in *Xenopus* oocytes. *FEBS Lett.* **513**, 253-258.
- ❑ Paukert, M., Sidi, S., Russell, C., Siba, M., Wilson, S. W., Nicolson, T., & Grunder, S. (2004). A family of acid-sensing ion channels (ASICs) from the zebrafish: Widespread expression in the central nervous system suggests a conserved role in neuronal communication. *J Biol.Chem.* **279**, 18783-18791.
- ❑ Paukert, M., Babini, E., Pusch, M., & Grunder, S. (2004). Identification of the Ca^{2+} blocking site of acid-sensing ion channel (ASIC) 1: implications for channel gating. *J Gen.Physiol* **124**, 383-394.
- ❑ Springauf, A. & Grunder, S. (2010). An acid-sensing ion channel from shark (*Squalus acanthias*) mediates transient and sustained responses to protons. *J Physiol.* **588**, 809-820.

Examples (SEC Recordings)

- ❑ Bittner, K., & Müller, W. (1999). Oxidative downmodulation of the transient K-current IA by intracellular arachidonic acid in rat hippocampal neurons. *J. Neurophysiol.* **82**, 508-511.
- ❑ Dhein, S. (1998) Cardiac Gap Junction Channels, Physiology, Regulation, Pathophysiology and Pharmacology, Karger, Basel.
- ❑ Müller, W., & Bittner, K. (2002). Differential oxidative modulation of voltage-dependent K^{+} currents in rat hippocampal neurons. *J. Neurophysiol* **87**, 2990–2995.

- ❑ Xing, D., Kjolbye, A. L., Nielsen, M. S., Petersen, J. S., Harlow, K. W., Holstein-Rathlou, N. H., & Martins, J. B. (2003). ZP123 increases gap junctional conductance and prevents reentrant ventricular tachycardia during myocardial ischemia in open chest dogs. *J Cardiovasc. Electrophysiol.* **14**, 510-520.

Examples (Other)

- ❑ Alix, P., Winterer, J., & Muller, W. (2003). New illumination technique for IR-video guided patch-clamp recording from neurons in slice cultures on biomembrane. *J Neurosci. Methods* **128**, 79-84.
- ❑ Egorov, A. V., Angelova, P. R., Heinemann, U., & Muller, W. (2003). Ca²⁺-independent muscarinic excitation of rat medial entorhinal cortex layer V neurons. *Eur. J. Neurosci.* **18**, 3343-3351.
- ❑ Procida, K., Jorgensen, L., Schmitt, N., Delmar, M., Taffet, S. M., Holstein-Rathlou, N. H., Nielsen, M. S., & Braunstein, T. H. (2009). Phosphorylation of connexin43 on serine 306 regulates electrical coupling. *Heart Rhythm.* **6**, 1632-1638.
- ❑ Rudhard, Y., Kneussel, M., Nassar, M. A., Rast, G. F., Annala, A. J., Chen, P. E., Tigaret, C. M., Dean, I., Roes, J., Gibb, A. J., Hunt, S. P., & Schoepfer, R. (2003). Absence of Whisker-Related Pattern Formation in Mice with NMDA Receptors Lacking Coincidence Detection Properties and Calcium Signaling. *J Neurosci.* **23**, 2323-2332.
- ❑ Sobolevsky, A. I., Yelshansky, M. V., & Wollmuth, L. P. (2003). Different Gating Mechanisms in Glutamate Receptor and K⁺ Channels. *J Neurosci.* **23**, 7559-7568.
- ❑ Sobolevsky, A. I., Yelshansky, M. V., & Wollmuth, L. P. (2005). State-Dependent Changes in the Electrostatic Potential in the Pore of a GluR Channel. *Biophys. J* **88**, 235-242.
- ❑ Thalhammer, A., Rudhard, Y., Tigaret, C. M., Volynski, K. E., Rusakov, D. A., & Schoepfer, R. (2006). CaMKII translocation requires local NMDA receptor-mediated Ca²⁺ signaling. *The EMBO Journal* **25**, 5873-5883.
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- ❑ Yelshansky, M. V., Sobolevsky, A. I., Jatzke, C., & Wollmuth, L. P. (2004). Block of AMPA receptor desensitization by a point mutation outside the ligand-binding domain. *J Neurosci.* **19**, 4728-4736.