

COMMENTARIES

- e202313343 **Tweaking the catalytic efficiency of the CFTR ion channel**

Nael A. McCarty

- e202313337 **Sensing its own permeant ion: KCNQ1 channel inhibition by external K⁺**

Rene Barro-Soria

ARTICLES

- e202213205 **Mechanism of external K⁺ sensitivity of KCNQ1 channels**

Astghik Abrahamyan, Jodene Eldstrom, Harutyun Sahakyan, Nare Karagulyan, Liana Mkrtchyan, Tatev Karapetyan, Ernest Sargsyan, Matthias Kneussel, Karen Nazaryan, Jürgen R. Schwarz, David Fedida, and Vitya Vardanyan

- e202213260 **Microscopic mechanism of PIEZO1 activation by pressure-induced membrane stretch**

Tharaka D. Wijerathne, Alper D. Ozkan, and Jérôme J. Lacroix

- e202213170 **Similar voltage-sensor movement in spHCN channels can cause closing, opening, or inactivation**

Xiaoan Wu, Kevin P. Cunningham, Rosamary Ramentol, Marta E. Perez, and H. Peter Larsson

- e202213300 **Differential regulation of cardiac sodium channels by intracellular fibroblast growth factors**

Paweorn Angsutararux, Amal K. Dutta, Martina Marras, Carlota Abella, Rebecca L. Mellor, Jingyi Shi, Jeanne M. Nerbonne, and Jonathan R. Silva

- e202213226 **A cooperative knock-on mechanism underpins Ca²⁺-selective cation permeation in TRPV channels**

Callum M. Ives, Neil J. Thomson, and Ulrich Zachariae

- e202213273 **Blockade of TRPV channels by intracellular spermine**

Grigory Maksaev, Peng Yuan, and Colin G. Nichols

- e202213212 **Depolarization-induced bursts of miniature synaptic currents in individual synapses of developing cerebellum**

Bastien Le Guellec, Laura C. Gomez, Gerardo Malagon, Thibault Collin, and Alain Marty

- e202213290 **Thin filament regulation of cardiac muscle power output: Implications for targets to improve human failing hearts**

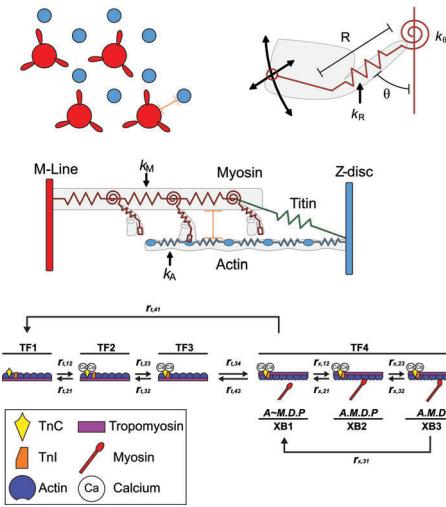
Laurin M. Hanft, Joel C. Robinett, Theodore J. Kalogeris, Kenneth S. Campbell, Brandon J. Biesiadecki, and Kerry S. McDonald

- e202213291 **Machine learning meets Monte Carlo methods for models of muscle's molecular machinery to classify mutations**

Anthony Asencio, Sage Malingen, Kristina B. Kooiker, Joseph D. Powers, Jennifer Davis, Thomas Daniel, and Farid Moussavi-Harami

- e202213302 **BK channels of five different subunit combinations underlie the de novo KCNMA1 G375R channelopathy**

Yanyan Geng, Ping Li, Alice Butler, Bill Wang, Lawrence Salkoff, and Karl L. Magleby



ON THE COVER

A detailed computational model of striated muscle elucidates how mutations and drugs may alter twitch timing. The spatially explicit model simulates myosin motors connected within a compliant, contractile lattice, complete with thin filament regulation and varying mutation penetrance. The model yields data used to train classifiers.

Image © Asencio et al., 2023. See <https://doi.org/10.1085/jgp.202213291>.

e202213168

Mechanosensitive channel MscS is critical for termination of the bacterial hypoosmotic permeability response

Elissa Moller, Madolyn Britt, Anthony Schams, Hannah Cetuk, Andriy Anishkin, and Sergei Sukharev

LETTER TO THE EDITOR

e202313371

About hysteresis in Shaker: A note on Cowgill and Chanda

Carlos A. Villalba-Galea

REPLY

e202313381

About hysteresis in Shaker: Response to note by Villalba-Galea

Baron Chanda and John Cowgill

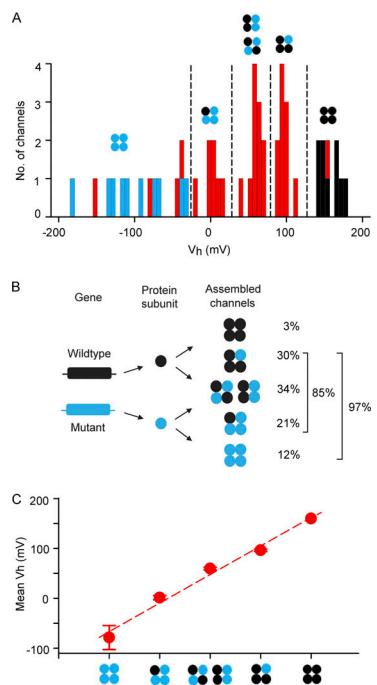


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