

EDITORIAL

- e202112972 **Further progress in understanding of myofibrillar function in health and disease**
Christine Cremo, Richard L. Moss, and Henk L. Granzier

RESEARCH NEWS

- e202112973 **cMyBPC phosphorylation alters response to heart failure drug**
Ben Short

COMMENTARIES

- e202112904 **Titin-N2A: More than a signaling node?**
Robbert J. van der Pijl and Coen A.C. Ottenheijm

- e202112928 **Why make a strong muscle weaker?**
Bogdan Iorga and Theresia Kraft

REVIEW

- e202012777 **Novel insights into sarcomere regulatory systems control of cardiac thin filament activation**
Christopher Solís and R. John Solaro

ARTICLES

- e202012770 **Cardiac MyBP-C phosphorylation regulates the Frank-Starling relationship in murine hearts**
Laurin M. Hanft, Daniel P. Fitzsimons, Timothy A. Hacker, Richard L. Moss, and Kerry S. McDonald

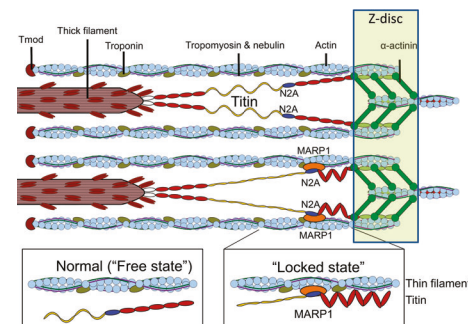
- e202012816 **cMyBPC phosphorylation modulates the effect of omecamtiv mecarbil on myocardial force generation**
Ranganath Mamidi, Joshua B. Holmes, Chang Yoon Doh, Katherine L. Dominic, Nikhil Madugula, and Julian E. Stelzer

- e202012811 **Impact of regulatory light chain mutation K104E on the ATPase and motor properties of cardiac myosin**
David V. Rasicci, Orville Kirkland Jr., Faruk H. Moonschi, Neil B. Wood, Danuta Szczesna-Cordary, Michael J. Previs, Jonathan F. Wenk, Kenneth S. Campbell, and Christopher M. Yengo

- e202012801 **Cardiomyopathic mutations in essential light chain reveal mechanisms regulating the super relaxed state of myosin**
Yoel H. Sitbon, Francisca Diaz, Katarzyna Kazmierczak, Jingsheng Liang, Medhi Wangpaichitr, and Danuta Szczesna-Cordary

- e202012766 **The N2A region of titin has a unique structural configuration**
Chiara Stroncsek, Stephan Lange, Belinda Bullard, Sebastian Wolniak, Emma Börjeson, Olga Mayans, and Jennifer R. Fleming

- e202012789 **Mavacamten has a differential impact on force generation in myofibrils from rabbit psoas and human cardiac muscle**
Beatrice Scellini, Nicoletta Piroddi, Marica Dente, Giulia Vitale, Josè Manuel Pioner, Raffaele Coppini, Cecilia Ferrantini, Corrado Poggesi, and Chiara Tesi



ON THE COVER

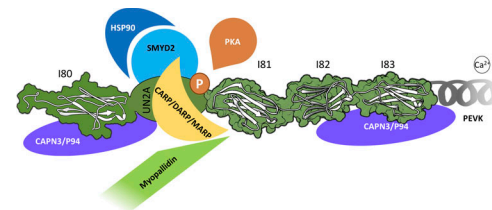
The mechanism by which MARP1 locks titin-N2A (blue) to the thin filament in sarcomeres. (A) The "free state" of titin-N2A. (B) The "locked state" with MARP1 (orange) locking titin-N2A to the thin filament. (C) Detail of the free and locked states. Titin domains: Ig, red; PEVK, yellow; fibronectin, white.

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<http://doi.org/10.1085/jgp.202112925>

e202012776 **Caldesmon ablation in mice causes umbilical herniation and alters contractility of fetal urinary bladder smooth muscle**

Sandra Pütz, Lisa Sophie Barthel, Marina Frohn, Doris Metzler, Mohammed Barham, Galyna Pryymachuk, Oliver Trunschke, Lubomir T. Lubomirov, Jürgen Hescheler, Joseph M. Chalovich, Wolfram F. Neiss, Manuel Koch, Mechthild M. Schroeter, and Gabriele Pfitzer



e202112925 **Muscle ankyrin repeat protein 1 (MARP1) locks titin to the sarcomeric thin filament and is a passive force regulator**

Robbert J. van der Pijl, Marloes van den Berg, Martijn van de Locht, Shengyi Shen, Sylvia J.P. Bogaards, Stefan Conijn, Paul Langlais, Pleuni E. Hooijman, Siegfried Labeit, Leo M.A. Heunks, Henk Granzier, and Coen A.C. Ottenheijm

N2A and its interaction partners.

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COMMUNICATIONS

e202012829 **Contraction-relaxation coupling is unaltered by exercise training and infarction in isolated canine myocardium**

Farbod Fazlollahi, Jorge J. Santini Gonzalez, Steven J. Repas, Benjamin D. Canan, George E. Billman, and Paul M.L. Janssen

e202012743 **Tubulin acetylation increases cytoskeletal stiffness to regulate mechanotransduction in striated muscle**

Andrew K. Coleman, Humberto C. Joca, Guoli Shi, W. Jonathan Lederer, and Christopher W. Ward