Circulation Research

Volume 73 Number 4 October 1993

Expedited Publication

Ca$^{2+}$ and Segment Length Dependence of Isometric Force Kinetics in Intact Ferret Cardiac Muscle
William O. Hancock, Donald A. Martyn, Lee L. Huntsman ................................................................. 603

Original Contributions

Molecular Structure and Transcriptional Function of the Rat Vascular AT$_1$, Angiotensin Receptor Gene
Kazuhisa Takeuchi, R. Wayne Alexander, Yasuyuki Nakamura, Takeshi Tsujino, T.J. Murphy ................ 612

Characterization of Promoter Elements of the Rabbit Cardiac Sarcoplasmic Reticulum Ca$^{2+}$-ATPase Gene Required for Expression in Cardiac Muscle Cells
Steven A. Fisher, Peter M. Buttrick, Drew Sukovich, Muthu Periasamy ..................................................... 622

Heart-Specific Targeting of Firefly Luciferase by the Myosin Light Chain-2 Promoter and Developmental Regulation in Transgenic Mice
Wolfgang-Michael Franz, Daniel Breves, Karin Klingel, Gottfried Brem, Peter Hans Hofschnieder, Reinhard Kandolf ................................................................. 629

Renin mRNA Quantification Using Polymerase Chain Reaction in Cultured Juxtaglomerular Cells: Short-term Effects of cAMP on Renin mRNA and Secretion
Roberto Della Bruna, Armin Kurtz, Pierre Convol, Florence Pinet ............................................................. 639

Catecholamines Can Induce Adenosine Receptor-Mediated Protection of the Myocardium but Do Not Participate in Ischemic Preconditioning in the Rabbit
Jon D. Thornton, J.F. Daly, Michael V. Cohen, Xi-Ming Yang, James M. Downey ........................................ 649

Preconditioning Against Myocardial Dysfunction After Ischemia and Reperfusion by an $\alpha_1$-Adrenergic Mechanism
Anirban Banerjee, Cristee Locke-Winter, Kevin B. Rogers, Max B. Mitchell, Elizabeth C. Brew, Charles B. Cairns, Dennis D. Bensard, Alden H. Harken ................................................................. 656

Potentiation by Hypercholesterolemia of the Induction of Aortic Intramural Synthesis of Plasminogen Activator Inhibitor Type 1 by Endothelial Injury
Hiroyumi Sawa, Burton E. Sobel, Satoshi Fuji ................................................................. 671

Malondialdehyde and Glutathione Production in Isolated Perfused Human and Rat Hearts
Maarten Janssen, Johan F. Koster, Egbert Bos, Jan Willem de Jong .......................................................... 681

Selective Induction of an Embryonic Fibronectin Isoform in the Rat Aorta In Vitro
Masayuki Hosoi, Izumi Takasaki, Anna Pavlova-Rezakova, Hideo Himeno, Aram V. Chobanian, Peter Brecher ................................................................. 689

Dynamic Interaction Between Cardiac Myosin Isoforms Modifies Velocity of Actomyosin Sliding In Vitro
Masataka Sata, Seiyo Sugita, Hiroshi Yamashita, Shin-ichi Momomura, Takashi Serizawa ................................................................. 696

Direct Evidence That the Hydroxyl Radical Plays a Pathogenetic Role in Myocardial “Stunning” in the Conscious Dog and Demonstration That Stunning Can Be Markedly Attenuated Without Subsequent Adverse Effects
Selim Sekili, Paul B. McCay, Xiao-Ying Li, Marcel Zughailb, Jian-Zhong Sun, Liang Tang, John I. Thornby, Roberto Bolli ................................................................. 705

CIRCULATION RESEARCH (ISSN 0009-7330) is published monthly by the American Heart Association, 7227 Greenville Avenue, Dallas, TX 75231-4596. For rates in Japan, contact Nankodo Co., Ltd., 42-6 Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan. In the United States, individuals may subscribe for their personal use at the following annual rates: $125 for members of an American Heart Association scientific council and $156 for nonmembers. Outside the United States, add $50 for postage. Contact AHA for single copy rates and subscription rates for medical professionals in training and for libraries, reading rooms, and other multiple-use institutions. Second class postage paid at Dallas, Texas, and additional mailing offices. POSTMASTER: Send address changes to CIRCULATION RESEARCH, American Heart Association, 7227 Greenville Avenue, Dallas, TX 75231-4596.
Spontaneous Sarcomeric Oscillations at Intermediate Activation Levels in Single Isolated Cardiac Myofibrils
W.A. Linke, M.L. Bartoo, G.H. Pollack ................................................................. 724

Partial Characterization of the rH1 Sodium Channel Protein From Rat Heart Using Subtype-Specific Antibodies
Sidney A. Cohen, Linda K. Levitt .................................................................................. 735

Protein Kinase C and Calcium Channel Activation as Determinants of Renal Vasconstriction by Angiotensin II and Endothelin
Tsuneo Takenaka, Hayley Forster, Murray Epstein .................................................. 743

Protein Kinase A–Activated Chloride Channel Is Inhibited by the Ca^{2+}-Calmodulin Complex in Cardiac Sarcoplasmic Reticulum
Seiko Kawano, Masayasu Hiraoka .................................................................................. 751

Contractile and Morphological Impairment of Cultured Fetal Mouse Myocytes Induced by Oxygen Radicals and Oxidants: Correlation With Intracellular Ca^{2+} Concentration
Tomoe Y. Nakamura, Kiyoshi Goda, Tadashi Okamoto, Takeo Kishi, Takao Nakamura, Kiyota Goshima .......... 758

Brief Definitive Communication

Glibenclamide, a Putative ATP-Sensitive K^{+} Channel Blocker, Inhibits Coronary Autoregulation in Anesthetized Dogs
Takahiro Narishige, Kensuke Egashira, Yutaka Akatsuka, Yousuke Katsuda, Kohtaro Numaguchi, Makoto Sakata, Akira Takeshita .................................................................................. 771

Rapid Communication

T-Type Ca^{2+} Current Is Expressed in Hypertrophied Adult Feline Left Ventricular Myocytes
H. Bradley Nuss, Steven R. Houser .................................................................................. 777

News from the American Heart Association ................................................................. A784
Meetings Calendar ......................................................................................................... A785