

CELL**Muscles**

Protruding masticatory (superfast) myosin heads from staggered thick filaments of dog jaw muscle revealed by X-ray diffraction

M. Yamaguchi, S. Takemori, M. Kimura,
Y. Tanishima, T. Nakayoshi, S. Kimura,
T. Ohno, N. Yagi, J.F.Y. Hoh and
Y. Umazume

53

Differentiation, Development, and Aging

Role of Nrf2 and p62/ZIP in the neurite outgrowth by carnosic acid in PC12h cells

K. Kosaka, J. Mimura, K. Itoh, T. Satoh,
Y. Shimojo, C. Kitajima, A. Maruyama,
M. Yamamoto and T. Shirasawa

73

BIOTECHNOLOGY**RNA Technology**

A lentiviral vector encoding two fluorescent proteins enables imaging of adenoviral infection via adenovirus-encoded miRNAs in single living cells

Y. Kato, S.Y. Sawata and A. Inoue

63

Immunological Engineering

Generation of a recombinant single-chain variable fragment (scFv) targeting 5-methyl-2'-deoxycytidine

M. Ohshima, T. Tadakuma, H. Hayashi,
K. Inoue and K. Itoh

135

CONTENTS Rearranged According to Subject Categories, Vol. 147, No. 1

EDITORIAL

New Editor-in-Chief of JB

K. Miyazono

1

JB REFLECTIONS AND PERSPECTIVES

Glycosphingolipids as mediators of phenotypic changes associated with development and cancer progression

Y. Igarashi and R. Kannagi

3

Akira Kobata: a man who established the structural basis for glycobiology of N-linked sugar chains

T. Endo

9

JB MINIREVIEWS—Quality Control of the Cellular Protein Systems

Mechanism and components of endoplasmic reticulum-associated degradation

J. Hoseki, R. Ushioda and K. Nagata

19

Stress-sensing mechanisms in the unfolded protein response: similarities and differences between yeast and mammals

K. Kohno

27

JB REVIEW

Bone morphogenetic protein receptors and signal transduction

K. Miyazono, Y. Kamiya and M. Morikawa

35

BIOCHEMISTRY

Biochemistry General

Hypoxemia induces expression of heme oxygenase-1 and heme oxygenase-2 proteins in the mouse myocardium

F. Han, K. Takeda, M. Ono, F. Date, K. Ishikawa, S. Yokoyama, Y. Shinozawa, K. Furuyama and S. Shibahara

143

Protein Structure

Crystal structure of peroxiredoxin from *Aeropyrum pernix* K1 complexed with its substrate, hydrogen peroxide

T. Nakamura, Y. Kado, T. Yamaguchi, H. Matsumura, K. Ishikawa and T. Inoue

109

Biomolecular Structures

Structure and reaction mechanism of human nicotinamide phosphoribosyltransferase

R. Takahashi, S. Nakamura, T. Nakazawa, K. Minoura, T. Yoshida, Y. Nishi, Y. Kobayashi and T. Ohkubo

95

Enzymology

Purification and some properties of wild-type and N-terminal-truncated ethanolamine ammonia-lyase of *Escherichia coli*

K. Akita, N. Hieda, N. Baba, S. Kawaguchi, H. Sakamoto, Y. Nakanishi, M. Yamanishi, K. Mori and T. Toraya

83

Atypical kinetics of cytochromes P450 catalysing 3'-hydroxylation of flavone from the white-rot fungus *Phanerochaete chrysosporium*

N. Kasai, S. Ikushiro, S. Hirosue, A. Arisawa, H. Ichinose, Y. Uchida, H. Wariishi, M. Ohta and T. Sakaki

117

MOLECULAR BIOLOGY

Bioinformatics

Characteristic amino acid distribution around segments unique to allergens

N. Asakawa, N. Sakiyama, R. Teshima and S. Mitaku

127

(Contents continued on inside of back cover)

