

CONTENTS Vol. 144, No. 1

JB Minireviews—New Paradigm in Glycobiology

Biological Functions of Glycosyltransferase Genes Involved in *O*-fucose Glycan Synthesis

T. Okajima, A. Matsuura and T. Matsuda 1

Heparan Sulphate Biosynthesis and Disease

S. Nadanaka and H. Kitagawa 7

Rapid Communication

Requirement of Ala Residues at g Position in Heptad Sequence of α -Helix-forming Peptide for Formation of Fibrous Structure

G. Aoki, T.K. Yamada, M. Arii, S. Kojima and T. Mizoguchi 15

Regular Papers

Chemical Modulation of the Chaperone Function of Human α A-Crystallin

A. Biswas, S. Lewis, B. Wang, M. Miyagi, P. Santoshkumar, M.H. Gangadhariah and R.H. Nagaraj 21

Bromophenol Blue Binding as a Probe to Study Urea and Guanidine Hydrochloride Denaturation of Bovine Serum Albumin

A.A.A. Halim, H.A. Kadir and S. Tayyab 33

SUMO Assay with Peptide Arrays on Solid Support: Insights into SUMO Target Sites

K. Schwamborn, P. Knipscheer, E. van Dijk, W.J. van Dijk, T.K. Sixma, R.H. Meloen and J.P.M. Langedijk 39

The Nucleocapsid Protein of SARS-CoV Induces Transcription of hfgl2 Prothrombinase Gene Dependent on C/EBP Alpha

M. Han, W. Yan, Y. Huang, H. Yao, Z. Wang, D. Xi, W. Li, Y. Zhou, J. Hou, X. Luo and Q. Ning 51

Identification of the Coiled-coil Domains of *Enterococcus faecalis* DivIVA that Mediate Oligomerization and their Importance for Biological Function

M.D. Rigden, C. Baier, S. Ramirez-Arcos, M. Liao, M. Wang and J.-A.R. Dillon 63

Investigating a Catalytic Mechanism of Hyperthermophilic L-Threonine Dehydrogenase from *Pyrococcus horikoshii*

N. Higashi, K. Tanimoto, M. Nishioka, K. Ishikawa and M. Taya 77

Carbon Fibre Composites: Integrated Electrochemical Sensors for Wound Management

D. Sharp, S. Forsythe and J. Davis 87

Chemical and Apoptotic Properties of Hydroxy-Ceramides Containing Long-Chain Bases with Unusual Alkyl Chain Lengths

M. Kyogashima, K. Tadano-Aritomi, T. Aoyama, A. Yusa, Y. Goto, K. Tamiya-Koizumi, H. Ito, T. Murate, R. Kannagi and A. Hara 95

Purification and Characterization of a Copper-Containing Amine Oxidase from *Mycobacterium* Sp. Strain JC1 DSM 3803 Grown on Benzylamine

H.-I. Lee, Y.M. Kim and Y.T. Ro 107

Humanization of an Anti-CD34 Monoclonal Antibody by Complementarity-determining Region Grafting Based on Computer-assisted Molecular Modelling

S. Hou, B. Li, L. Wang, W. Qian, D. Zhang, X. Hong, H. Wang and Y. Guo 115

Direct Observation of Conformational Folding Coupled with Disulphide Rearrangement by Using a Water-soluble Selenoxide Reagent—A Case of Oxidative Regeneration of Ribonuclease A under Weakly Basic Conditions

M. Iwaoka, F. Kumakura, M. Yoneda,
T. Nakahara, K. Henmi, H. Aonuma,
H. Nakatani and S. Tomoda

121