

### August 3, 2010

Volume 49, Issue 30 Pages 6299-6504

1. Pnc1p Supports Increases in Cellular NAD(H) Levels in Response to Internal or

#### **External Oxidative Stress**

Karyl I. Minard, Lee McAlister-Henn Biochemistry 2010 49 (30), 6299-6301

2. Discrimination of Saturated Aldehydes by the Rat I7 Olfactory Receptor

Michael D. Kurland, Michael B. Newcomer, Zita Peterlin, Kevin Ryan, Stuart Firestein, Victor S. Batista

Biochemistry 2010 49 (30), 6302-6304

3. Greasing Their Way: Lipid Modifications Determine Protein Association with

#### **Membrane Rafts**

Ilya Levental, Michal Grzybek, Kai Simons *Biochemistry* **2010** *49* (30), 6305-6316

4. Characterization of Membrane Protein Non-native States. 1. Extent of Unfolding and

Aggregation of Rhodopsin in the Presence of Chemical Denaturants

Arpana Dutta, Kalyan C. Tirupula, Ulrike Alexiev, Judith Klein-Seetharaman *Biochemistry* **2010** *49* (30), 6317-6328

5. Characterization of Membrane Protein Non-native States. 2. The SDS-Unfolded

### States of Rhodopsin

Arpana Dutta, Tai-Yang Kim, Martina Moeller, Jenny Wu, Ulrike Alexiev, Judith Klein-Seetharaman

Biochemistry 2010 49 (30), 6329-6340

6. Binding Characteristics of Small Molecules That Mimic Nucleocapsid Protein-

Induced Maturation of Stem-Loop 1 of HIV-1 RNA
Janet Chung, Nikolai B. Ulyanov, Christophe Guilbert, Anwer Mujeeb, Thomas L. James

Biochemistry 2010 49 (30), 6341-6351
 The V510D Suppressor Mutation Stabilizes ΔF508-CFTR at the Cell Surface Tip W. Loo, M. Claire Bartlett, David M. Clarke

Biochemistry 2010 49 (30), 6352-6357

8. Mechanistic Investigation of the Inhibition of Aβ42 Assembly and Neurotoxicity by

Aβ42 C-Terminal Fragments
Huiyuan Li, Bernhard H. Monien, Aleksey Lomakin, Reeve Zemel, Erica A. Fradinger, Miao Tan,
Sean M. Spring, Brigita Urbanc, Cui-Wei Xie, George B. Benedek, Gal Bitan

Biochemistry 2010 49 (30), 6358-6364

9. Structural and Functional Analysis of the C-Terminus of Gαq in Complex with the

**Human Thromboxane A2 Receptor Provides Evidence of Constitutive Activity** 

Annirudha Chillar, Jiaxin Wu, Vanessa Cervantes, Ke-He Ruan *Biochemistry* **2010** *49* (30), 6365-6374

10. Kinetic Mechanism of the Rtt109–Vps75 Histone Acetyltransferase–Chaperone

Complex

Brittany N. Albaugh, Erin M. Kolonko, John M. Denu

Biochemistry 2010 49 (30), 6375-6385

### 11. Kinetic Characterization of Salmonella FliK–FlhB Interactions Demonstrates Complexity of the Type III Secretion Substrate-Specificity Switch

Daniel P. Morris, Eric D. Roush, J. Will Thompson, M. Arthur Moseley, James W. Murphy, Jonathan L. McMurry

Biochemistry 2010 49 (30), 6386-6393

### 12. Structural and Kinetic Study of the Extended Active Site for Proton Transfer in Human Carbonic Anhydrase II

John F. Domsic, Wilton Williams, Suzanne Z. Fisher, Chingkuang Tu, Mavis Agbandje-McKenna, David N. Silverman, Robert McKenna *Biochemistry* **2010** *49* (30), 6394-6399

## 13. Substrate-Induced Closing of the Active Site Revealed by the Crystal Structure of Pantothenate Synthetase from Staphylococcus aureus

Atsuko Satoh, Saki Konishi, Haruka Tamura, Hannah G. Stickland, Heather M. Whitney, Alison G. Smith, Hiroyoshi Matsumura, Tsuyoshi Inoue *Biochemistry* **2010** *49* (30), 6400-6410

# 14. Crystal Structure of a Complex between the Actinomadura R39 dd-Peptidase and a Peptidoglycan-mimetic Boronate Inhibitor: Interpretation of a Transition State Analogue in Terms of Catalytic Mechanism

Liudmila Dzhekieva, Mathieu Rocaboy, Frédéric Kerff, Paulette Charlier, Eric Sauvage, R. F. Pratt

Biochemistry 2010 49 (30), 6411-6419

15. The N-Terminal Integrity Is Critical for the Stability and Biological Functions of Endostatin

Yan Fu, Yongzhang Luo *Biochemistry* **2010** *49* (30), 6420-6429

### 16. Functionally Important Amino Acids in the Arabidopsis Thylakoid Phosphate Transporter: Homology Modeling and Site-Directed Mutagenesis

Lorena Ruiz-Pav<sup>©</sup>n, Patrik M. Karlsson, Jonas Carlsson, Dieter Samyn, Bengt Persson, Bengt L. Persson, Cornelia Spetea

Biochemistry 2010 49 (30), 6430-6439

17. Crystal Structure of the Nosiheptide-Resistance Methyltransferase of Streptomyces actuosus

Huirong Yang, Zhe Wang, Yan Shen, Ping Wang, Xu Jia, Liang Zhao, Pei Zhou, Rui Gong, Ze Li, Ying Yang, Dongrong Chen, Alastair I. H. Murchie, Yanhui Xu *Biochemistry* **2010** *49* (30), 6440-6450

18. Conformational Transitions in Human AP Endonuclease 1 and Its Active Site Mutant during Abasic Site Repair

Lyubov Yu. Kanazhevskaya, Vladimir V. Koval, Dmitry O. Zharkov, Phyllis R. Strauss, Olga S. Fedorova

Biochemistry 2010 49 (30), 6451-6461

19. Isolation, Structure Elucidation, and Synergistic Antibacterial Activity of a Novel Two-Component Lantibiotic Lichenicidin from Bacillus licheniformis VK21

Zakhar O. Shenkarev, Ekaterina I. Finkina, Elina K. Nurmukhamedova, Sergey V. Balandin, Konstantin S. Mineev, Kirill D. Nadezhdin, Zoya A. Yakimenko, Andrey A. Tagaev, Yuri V. Temirov, Alexander S. Arseniev, Tatiana V. Ovchinnikova *Biochemistry* **2010** *49* (30), 6462-6472

#### 20. Brønsted Analysis of an Enzyme-Catalyzed Pseudo-Deglycosylation Reaction:

#### Mechanism of Desialylation in Sialidases

Fahimeh S. Shidmoossavee, Lydia Cheng, Jacqueline N. Watson, Andrew J. Bennet *Biochemistry* **2010** *49* (30), 6473-6484

21. Mutational Analysis of Substrate Interactions with the Active Site of Dialkylglycine Decarboxylase

Emily J. Fogle, Michael D. Toney *Biochemistry* **2010** *49* (30), 6485-6493

22. Structurally Designed trans-2-Phenylcyclopropylamine Derivatives Potently Inhibit Histone Demethylase LSD1/KDM1,,§

Shinya Mimasu, Naoki Umezawa, Shin Sato, Tsunehiko Higuchi, Takashi Umehara, Shigeyuki Yokoyama

Biochemistry 2010 49 (30), 6494-6503