See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/44645170

# Disease-Associated Mutations in the p150(Glued) Subunit Destabilize the CAP-gly Domain

**ARTICLE** in BIOCHEMISTRY · JUNE 2010

Impact Factor: 3.02 · DOI: 10.1021/bi100235z · Source: PubMed

CITATIONS

19 26

**5 AUTHORS**, INCLUDING:

Shubbir Ahmed

Translational Health Science and Technolo..

13 PUBLICATIONS 133 CITATIONS

SEE PROFILE

**READS** 

Tatyana Polenova

University of Delaware

**88** PUBLICATIONS **1,762** CITATIONS

SEE PROFILE



June 29, 2010 Volume 49, Issue 25 Pages 5083-5404

- 1. Disease-Associated Mutations in the p150Glued Subunit Destabilize the CAP-gly Domain Shubbir Ahmed, Shangjin Sun, Amanda E. Siglin, Tatyana Polenova, John C. Williams *Biochemistry* 2010 *49* (25), 5083-5085
- 2. Osmolyte-Induced Folding of an Intrinsically Disordered Protein: Folding Mechanism in the Absence of Ligand

Yu-Chu Chang, Terrence G. Oas *Biochemistry* **2010** *49* (25), 5086-5096

3. Understanding the Binding of Procyanidins to Pancreatic Elastase by Experimental and Computational Methods

Natércia F. Brás, Rui Gon ⊊alves, Pedro A. Fernandes, Nuno Mateus, Maria João Ramos, Victor de Freitas

Biochemistry 2010 49 (25), 5097-5108

4. Highly Sensitive Analysis of the Interaction between HIV-1 Gag and Phosphoinositide Derivatives Based on Surface Plasmon Resonance

Kensaku Anraku, Ryota Fukuda, Nobutoki Takamune, Shogo Misumi, Yoshinari Okamoto, Masami Otsuka, Mikako Fujita

Biochemistry 2010 49 (25), 5109-5116

5. Intermolecular Interactions in a 44 kDa Interferon–Receptor Complex Detected by Asymmetric Reverse-Protonation and Two-Dimensional NOESY

Ilona Nudelman, Sabine R. Akabayov, Einat Schnur, Zohar Biron, Rina Levy, Yingqi Xu, Daiwen Yang, Jacob Anglister

Biochemistry 2010 49 (25), 5117-5133

6. Solution Structure of GxTX-1E, a High-Affinity Tarantula Toxin Interacting with Voltage Sensors in Kv2.1 Potassium Channels,

Seungkyu Lee, Mirela Milescu, Hyun Ho Jung, Ju Yeon Lee, Chan Hyung Bae, Chul Won Lee, Ha Hyung Kim, Kenton J. Swartz, Jae II Kim *Biochemistry* **2010** *49* (25), 5134-5142

7. Structural Basis of the Recognition of the SAMP Motif of Adenomatous Polyposis Coli by the Src-Homology 3 Domain

Shuji Kaieda, Chiyuki Matsui, Yuko Mimori-Kiyosue, Takahisa Ikegami *Biochemistry* **2010** *49* (25), 5143-5153

8. Characterization of Chloride-Depleted Human Sulfite Oxidase by Electron Paramagnetic Resonance Spectroscopy: Experimental Evidence for the Role of Anions in Product Release

Asha Rajapakshe, Kayunta Johnson-Winters, Anna R. Nordstrom, Kimberly T. Meyers, Safia Emesh, Andrei V. Astashkin, John H. Enemark *Biochemistry* **2010** *49* (25), 5154-5159

9. Arginines 65 and 310 in Putidaredoxin Reductase Are Critical for Interaction with Putidaredoxin

Irina F. Sevrioukova, Thomas L. Poulos

Biochemistry 2010 49 (25), 5160-5166

10. Identification of Residual Structure in the Unfolded State of Ribonuclease H1 from the Moderately Thermophilic Chlorobium tepidum: Comparison with Thermophilic and Mesophilic Homologues

Kathleen Ratcliff, Susan Marqusee *Biochemistry* **2010** *49* (25), 5167-5175

11. Increasing the Conformational Entropy of the  $\Omega$ -Loop Lid Domain in

Phosphoenolpyruvate Carboxykinase Impairs Catalysis and Decreases Catalytic Fidelity, Troy A. Johnson, Todd Holyoak

Biochemistry 2010 49 (25), 5176-5187

12. Valine 375 and Phenylalanine 109 Confer Affinity and Specificity for Pyruvate as Donor Substrate in Acetohydroxy Acid Synthase Isozyme II from Escherichia coli

Andrea Steinmetz, Maria Vyazmensky, Danilo Meyer, Ze'ev Barak, Ralph Golbik, David M. Chipman, Kai Tittmann

Biochemistry 2010 49 (25), 5188-5199

13. Structural Analysis of Botulinum Neurotoxin Type G Receptor Binding,

John Schmitt, Andrew Karalewitz, Desir e A. Benefield, Darren J. Mushrush, Rory N. Pruitt, Benjamin W. Spiller, Joseph T. Barbieri, D. Borden Lacy *Biochemistry* **2010** *49* (25), 5200-5205

14. The 1.4 Å Crystal Structure of the ArsD Arsenic Metallochaperone Provides Insights into Its Interaction with the ArsA ATPase

Jun Ye, A. Abdul Ajees, Jianbo Yang, Barry P. Rosen *Biochemistry* **2010** *49* (25), 5206-5212

- **15.** Conformation of Dimeric Apolipoprotein A-I Milano on Recombinant Lipoprotein Particles Shaila Bhat, Mary G. Sorci-Thomas, Laura Calabresi, Michael P. Samuel, Michael J. Thomas *Biochemistry* **2010** *49* (25), 5213-5224
- 16. Identification of Protein N-Terminal Methyltransferases in Yeast and Humans Kristofor J. Webb, Rebecca S. Lipson, Qais Al-Hadid, Julian P. Whitelegge, Steven G. Clarke Biochemistry 2010 49 (25), 5225-5235
- **17. Mapping of Lysine Methylation and Acetylation in Core Histones of Neurospora crassa** Lei Xiong, Keyur K. Adhvaryu, Eric U. Selker, Yinsheng Wang *Biochemistry* **2010** *49* (25), 5236-5243
- 18. Extensive and Varied Modifications in Histone H2B of Wild-Type and Histone Deacetylase

  1 Mutant Neurospora crassa

D. C. Anderson, George R. Green, Kristina Smith, Eric U. Selker *Biochemistry* **2010** *49* (25), 5244-5257

19. Energetic Effects of Magnesium in the Recognition of Adenosine Nucleotides by the F1-ATPase  $\beta$  Subunit

Nancy O. Pulido, Guillermo Salcedo, Gerardo Pérez-Hernández, Concepción José-Núñez, Adrián Velázquez-Campoy, Enrique García-Hernández *Biochemistry* **2010** *49* (25), 5258-5268

20. Familial Hypertrophic Cardiomyopathy Can Be Characterized by a Specific Pattern of Orientation Fluctuations of Actin Molecules,

J. Borejdo, D. Szczesna-Cordary, P. Muthu, N. Calander *Biochemistry* **2010** *49* (25), 5269-5277

21. Metamorphic Response of the CLIC1 Chloride Intracellular Ion Channel Protein upon Membrane Interaction

Sophia C. Goodchild, Michael W. Howell, Dene R. Littler, Ramya A. Mandyam, Kenneth L. Sale, Michele Mazzanti, Samuel N. Breit, Paul M. G. Curmi, Louise J. Brown *Biochemistry* **2010** *49* (25), 5278-5289

### 22. Probing the Strand Orientation and Registry Alignment in the Propagation of Amyloid Fibrils

Jason A. Wallace, Jana K. Shen

Biochemistry 2010 49 (25), 5290-5298

### 23. Specific Mutations Alter Fibrillation Kinetics, Fiber Morphologies, and Membrane Interactions of Pentapeptides Derived from Human Calcitonin

Amit Shtainfeld, Tania Sheynis, Raz Jelinek

Biochemistry 2010 49 (25), 5299-5307

#### 24. Palmitoylation and Testis-Enriched Expression of the Cysteine-String Protein $\boldsymbol{\beta}$ Isoform

Oforiwa A. Gorleku, Luke H. Chamberlain

Biochemistry 2010 49 (25), 5308-5313

### 25. Mechanism of the Calcium-Induced trans-cis Isomerization of a Non-Prolyl Peptide Bond in Clostridium histolyticum Collagenase

Justin Spiriti, Arjan van der Vaart

Biochemistry 2010 49 (25), 5314-5320

#### 26. The Human HDV-like CPEB3 Ribozyme Is Intrinsically Fast-Reacting

Durga M. Chadalavada, Elizabeth A. Gratton, Philip C. Bevilacqua *Biochemistry* **2010** *49* (25), 5321-5330

#### 27. Nitration of the Tumor Suppressor Protein p53 at Tyrosine 327 Promotes p53

#### **Oligomerization and Activation**

Vasily A. Yakovlev, Alexander S. Bayden, Paul R. Graves, Glen E. Kellogg, Ross B. Mikkelsen *Biochemistry* **2010** *49* (25), 5331-5339

## 28. Two Distinct Mechanisms of Inactivation of the Class Ic Ribonucleotide Reductase from Chlamydia trachomatis by Hydroxyurea: Implications for the Protein Gating of Intersubunit Electron Transfer

Wei Jiang, Jiajia Xie, Paul T. Varano, Carsten Krebs, J. Martin Bollinger Jr. *Biochemistry* **2010** *49* (25), 5340-5349

### 29. Structural Basis for Promoting and Preventing Decarboxylation in Glutaryl-Coenzyme A Dehydrogenases

Simon Wischgoll, Ulrike Demmer, Eberhard Warkentin, Robert Günther, Matthias Boll, Ulrich Ermler

Biochemistry 2010 49 (25), 5350-5357

### 30. Biochemical Properties and Biological Function of a Monofunctional Microbial Biotin Protein Ligase

Kyle G. Daniels, Dorothy Beckett

Biochemistry 2010 49 (25), 5358-5365

### 31. Biophysical Investigation of the Mode of Inhibition of Tetramic Acids, the Allosteric Inhibitors of Undecaprenyl Pyrophosphate Synthase

Lac V. Lee, Brian Granda, Karl Dean, Jianshi Tao, Eugene Liu, Rui Zhang, Stefan Peukert, Sompong Wattanasin, Xiaoling Xie, Neil S. Ryder, Ruben Tommasi, Gejing Deng *Biochemistry* **2010** *49* (25), 5366-5376

### 32. Role of Lys-12 in Catalysis by Triosephosphate Isomerase: A Two-Part Substrate Approach

Maybelle K. Go, Astrid Koudelka, Tina L. Amyes, John P. Richard *Biochemistry* **2010** *49* (25), 5377-5389

33. The Temperature Dependence of the Kinetic Isotope Effects of Dihydrofolate Reductase from Thermotoga maritima Is Influenced by Intersubunit Interactions
E. Joel Loveridge, Rudolf K. Allemann
Biochemistry 2010 49 (25), 5390-5396

34. Occupancy of Nonannular Lipid Binding Sites on KcsA Greatly Increases the Stability of the Tetrameric Protein

I. Triano, F. N. Barrera, M. L. Renart, M. L. Molina, G. Fernandez-Ballester, J. A. Poveda, A. M. Fernandez, J. A. Encinar, A. V. Ferrer-Montiel, D. Otzen, J. M. Gonzalez-Ros *Biochemistry* **2010** *49* (25), 5397-5404