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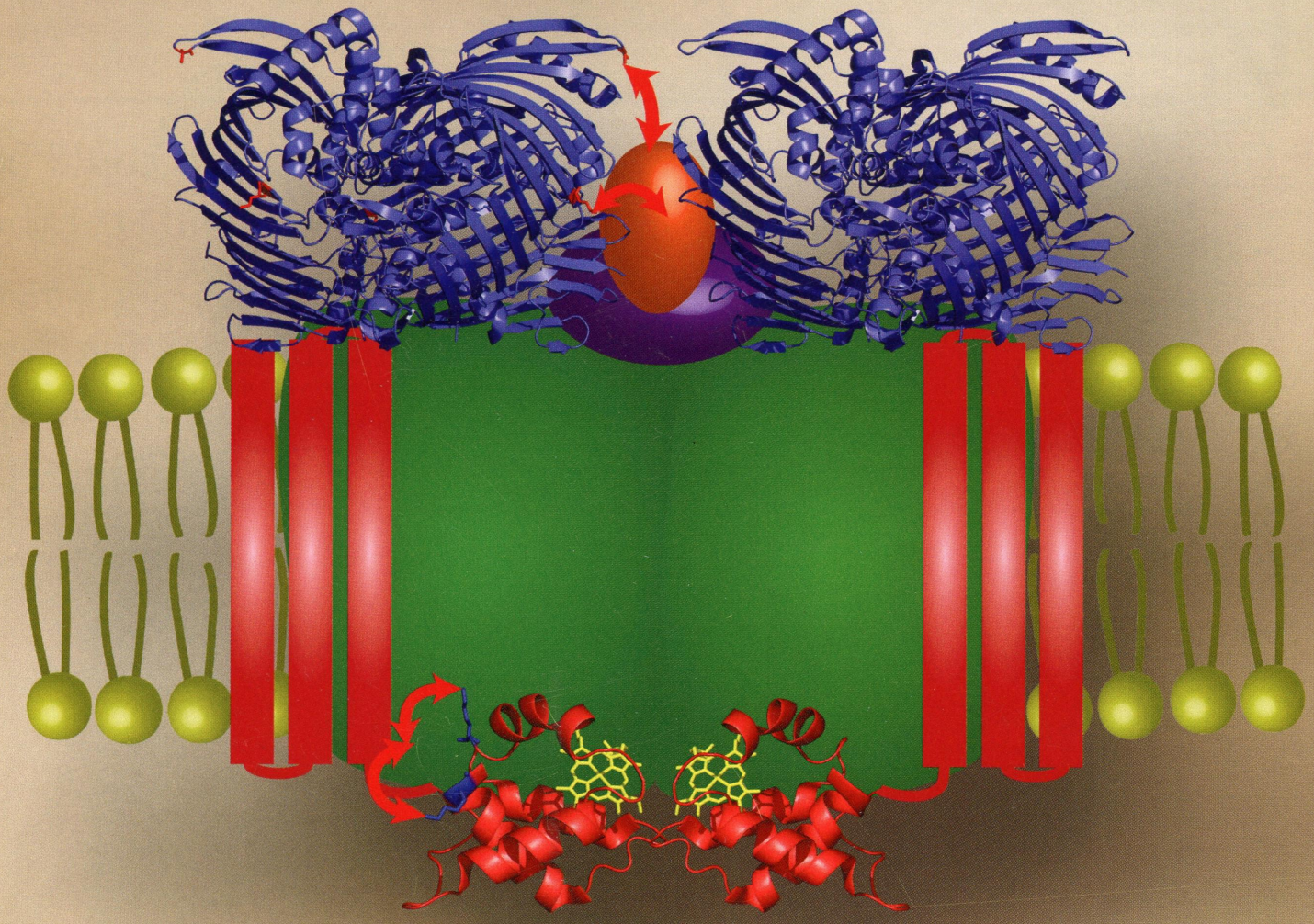

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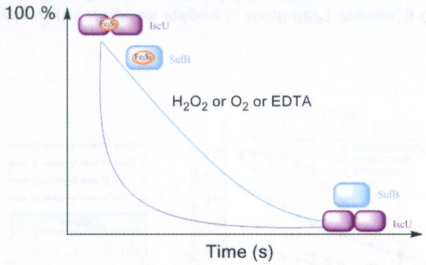
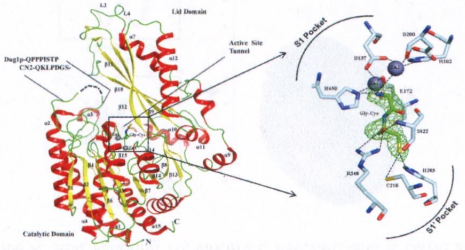
ON THE COVER: The photosynthetic apparatus of the anoxygenic photosynthetic green sulfur bacterium *Chlorobaculum tepidum* includes the reaction center core (RCC) complex and the FMO antenna protein. The RCC complex is an FeS-type (type I) reaction center, which is composed of a homodimeric core structure formed by two PscA proteins, PscB Fe-S protein, a cytochrome c_{551} (PscC) protein, and a PscD protein. A structural model of the FMO/RCC complex is proposed on the basis of chemical cross-linking results.

Rapid Reports



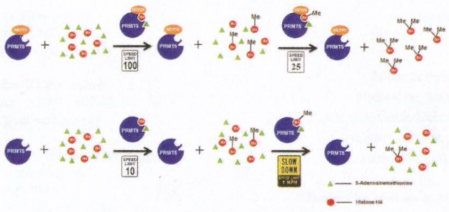
Articles



7884 S DOI: 10.1021/bi501279g

Protein Arginine Methyltransferase 5 Catalyzes Substrate Dimethylation in a Distributive Fashion

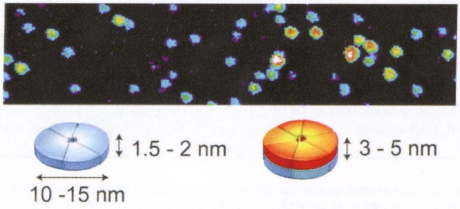
Min Wang, Jakob Fuhrmann, and Paul R. Thompson*



7893 S DOI: 10.1021/bi500910b

Capping of Aβ42 Oligomers by Small Molecule Inhibitors

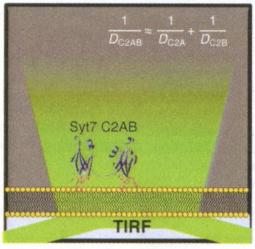
Ziao Fu, Darryl Aucoin, Mahiuddin Ahmed, Martine Ziliox, William E. Van Nostrand, and Steven O. Smith*



7904 S DOI: 10.1021/bi5012223

Lateral Diffusion of Proteins on Supported Lipid Bilayers: Additive Friction of Synaptotagmin 7 C2A–C2B Tandem Domains

Joseph K. Vasquez, Kan Chantranuvatana, Daniel T. Giardina, Matthew D. Coffman, and Jefferson D. Knight*

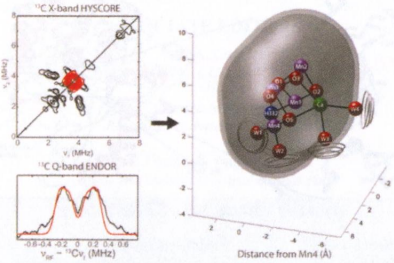


7914 S

DOI: 10.1021/bi501323h

Pulse Electron Paramagnetic Resonance Studies of the Interaction of Methanol with the S_2 State of the Mn_4O_5Ca Cluster of Photosystem II

Paul H. Oyala, Troy A. Stich, Jamie A. Stull, Fangting Yu, Vincent L. Pecoraro, and R. David Britt*

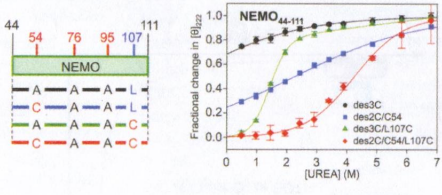


7929 S

DOI: 10.1021/bi500920n

Disulfide-Mediated Stabilization of the IκB Kinase Binding Domain of NF-κB Essential Modulator (NEMO)

Li Zhou, Alan T. Yeo, Carmine Ballarano, Urs Weber, Karen N. Allen,* Thomas D. Gilmore,* and Adrian Whitty*



7945 S

DOI: 10.1021/bi5007223

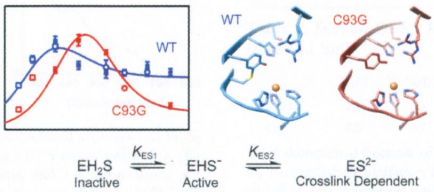
Structural and Biochemical Analysis of the *Hordeum vulgare* L. *Hv*GR-RBP1 Protein, a Glycine-Rich RNA-Binding Protein Involved in the Regulation of Barley Plant Development and Stress Response

Brian P. Tripet, Katelyn E. Mason, Brian J. Eilers, Jennifer Burns, Paul Powell, Andreas M. Fischer, and Valérie Copié*

7961 DOI: 10.1021/bi501277a

The Cys-Tyr Cross-Link of Cysteine Dioxygenase Changes the Optimal pH of the Reaction without a Structural Change

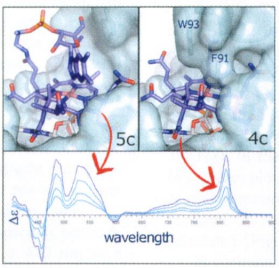
Casey G. Davies, Matthias Fellner, Egor P. Tchesnokov, Sigurd M. Wilbanks, and Guy N. L. Jameson*



7969 S DOI: 10.1021/bi5011877

Spectroscopic Studies of the *Salmonella enterica* Adenosyltransferase Enzyme *Se*CobA: Molecular-Level Insight into the Mechanism of Substrate Cob(II)alamin Activation

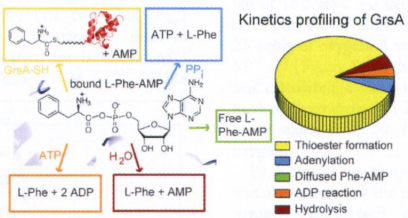
Ivan G. Pallares, Theodore C. Moore, Jorge C. Escalante-Semerena, and Thomas C. Brunold*

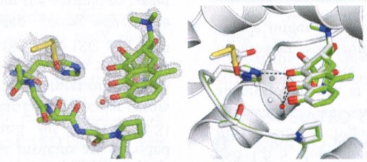


7983 S DOI: 10.1021/bi501156m

Kinetics Profiling of Gramicidin S Synthetase A, a Member of Nonribosomal Peptide Synthetases

Xun Sun, Hao Li, Jonas Alfermann, Henning D. Mootz, and Haw Yang*





Additions and Corrections

Ⓢ Supporting Information available via online article