

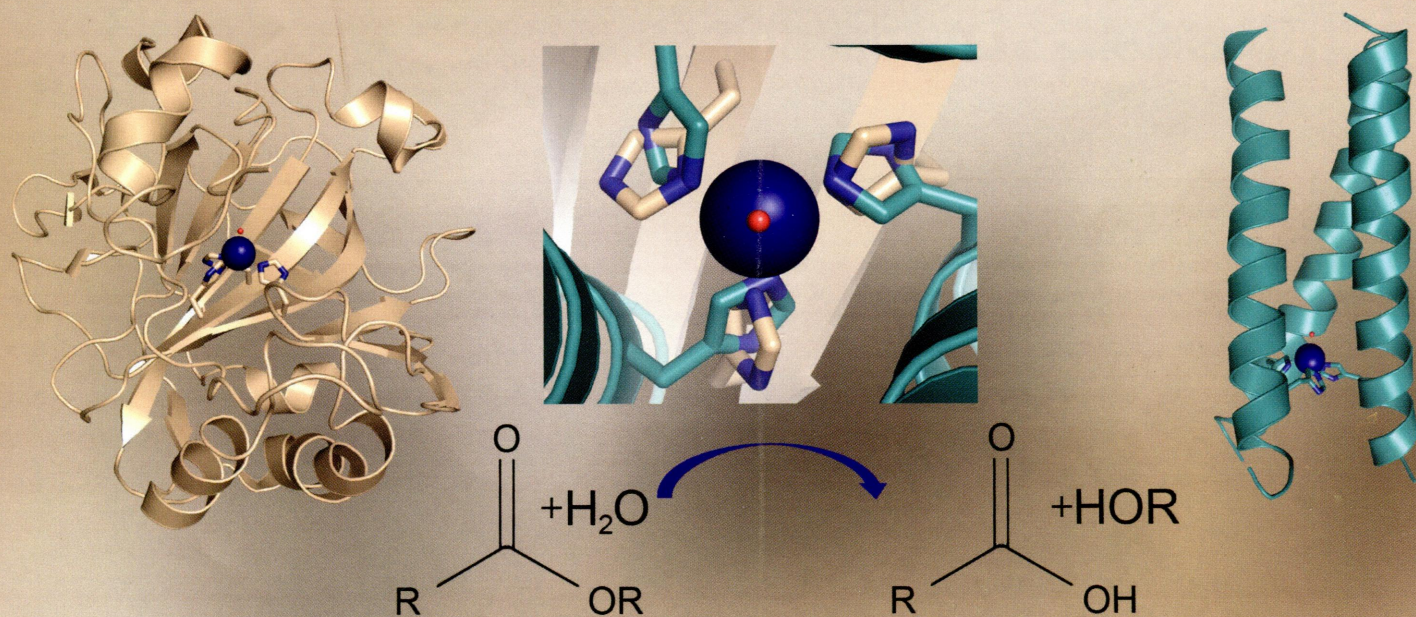
ПН
В60/вс

BIOCHEMISTRY

including biophysical chemistry & molecular biology

MAY 20, 2014 • VOLUME 53 NUMBER 19

pubs.acs.org/biochemistry



ACS Publications
Most Trusted. Most Cited. Most Read.

www.acs.org

BIOCHEMISTRY

including biophysical chemistry & molecular biology

MAY 20, 2014

VOLUME 53 ISSUE 19

BICHAW 53(19) 3063–3260 (2014)

ISSN 0006-2960

Registered in the U.S. Patent and Trademark Office

© 2014 by the American Chemical Society

ON THE COVER: Using de novo and redesign approaches toward the preparation of structural and functional models of hydrolytic zinc metalloenzymes. [Zastrow, M. L., and Pecoraro, V. L. (2014) *Biochemistry* 53, 957–978]

Rapid Reports

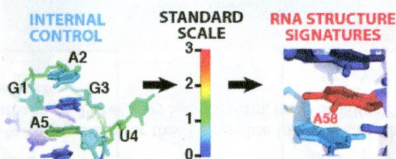
3063



dx.doi.org/10.1021/bi5003426

Standardization of RNA Chemical Mapping Experiments

Wipapat Kladwang, Thomas H. Mann, Alex Becka, Siqi Tian, Hanjoo Kim, Sungroh Yoon, and Rhiju Das*



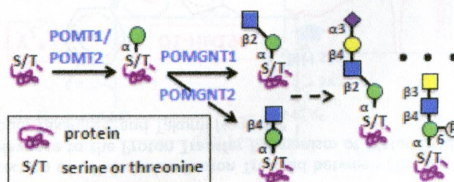
Current Topics

3066

dx.doi.org/10.1021/bi500153y

Mammalian O-Mannosylation Pathway: Glycan Structures, Enzymes, and Protein Substrates

Jeremy L. Praissman and Lance Wells*

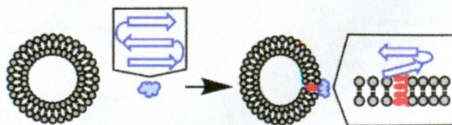


3079 **5**

dx.doi.org/10.1021/bi500027x

Equilibrium and Dynamic Spectroscopic Studies of the Interaction of Monomeric β -Lactoglobulin with Lipid Vesicles at Low pH

Ge Zhang and Timothy A. Keiderling*

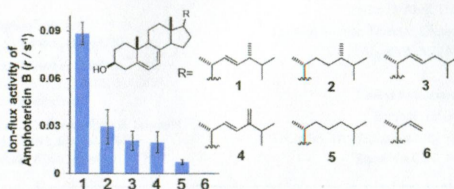


3088 **5**

dx.doi.org/10.1021/bi500122c

Effect of Sterol Side Chain on Ion Channel Formation by Amphotericin B in Lipid Bilayers

Yasuo Nakagawa, Yuichi Umegawa, Tetsuro Takano, Hiroshi Tsuchikawa, Nobuaki Matsumori,* and Michio Murata*

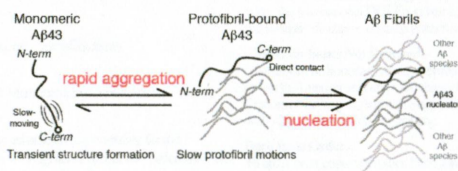


3095 **5**

dx.doi.org/10.1021/bi500131a

The C-Terminal Threonine of A β 43 Nucleates Toxic Aggregation via Structural and Dynamical Changes in Monomers and Protofibrils

Alexander E. Conicella and Nicolas L. Fawzi*

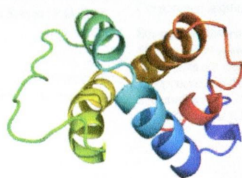


3106 **5**

dx.doi.org/10.1021/bi500177x

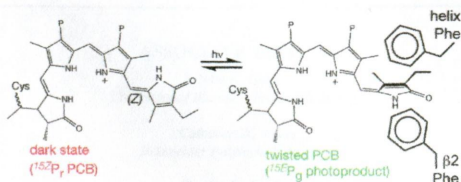
Unusual Structural Features Revealed by the Solution NMR Structure of the NLRC5 Caspase Recruitment Domain

Petrus G. M. Gutte, Simon Jurt, Markus G. Grütter,* and Oliver Zerbe*



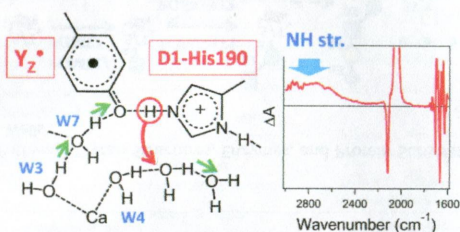
Conserved Phenylalanine Residues Are Required for Blue-Shifting of Cyanobacteriochrome Photoproducts

Nathan C. Rockwell, Shelley S. Martin, Alexander G. Gulevich, and J. Clark Lagarias*



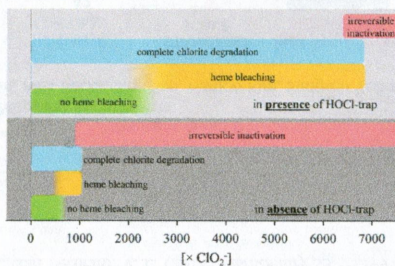
Fourier Transform Infrared Detection of a Polarizable Proton Trapped between Photooxidized Tyrosine Y₂ and a Coupled Histidine in Photosystem II: Relevance to the Proton Transfer Mechanism of Water Oxidation

Shin Nakamura, Ryo Nagao, Ryouta Takahashi, and Takumi Noguchi*



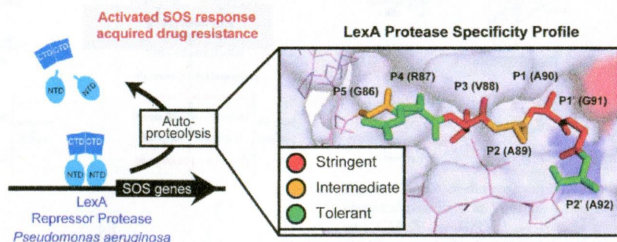
Transiently Produced Hypochlorite Is Responsible for the Irreversible Inhibition of Chlorite Dismutase

Stefan Hofbauer, Clemens Gruber, Katharina F. Pirker, Axel Sündermann, Irene Schaffner, Christa Jakopitsch, Chris Oostenbrink, Paul G. Furtmüller, and Christian Obinger*



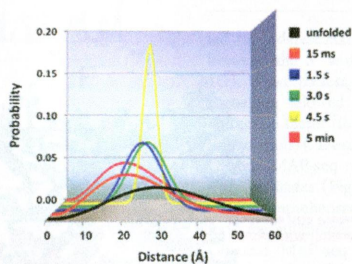
Specificity Determinants for Autoproteolysis of LexA, a Key Regulator of Bacterial SOS Mutagenesis

Charlie Y. Mo, L. Dillon Birdwell, and Rahul M. Kohli*



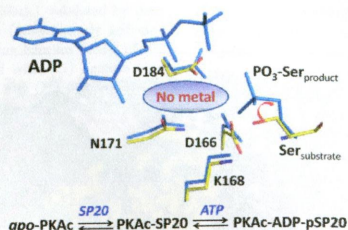
Fast Closure of N-Terminal Long Loops but Slow Formation of β Strands Precedes the Folding Transition State of *Escherichia coli* Adenylate Kinase

Tomer Orevi, Eldad Ben Ishay, Sivan Levin Gershanov, Mayan Ben Dalak, Dan Amir, and Elisha Haas*



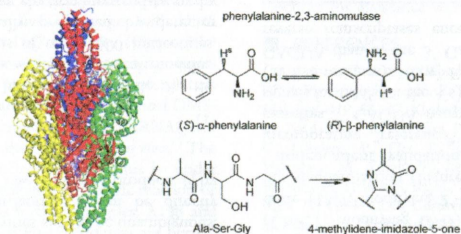
Metal-Free cAMP-Dependent Protein Kinase Can Catalyze Phosphoryl Transfer

Oksana Gerlits, Amit Das, Malik M. Keshwani, Susan Taylor, Mary Jo Waltman, Paul Langan, William T. Heller, and Andrey Kovalevsky*



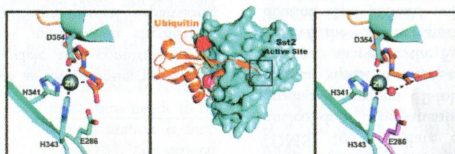
Structural Investigations into the Stereochemistry and Activity of a Phenylalanine-2,3-aminomutase from *Taxus chinensis*

Gjalt G. Wybenga, Wiktor Szymanski, Bian Wu, Ben L. Feringa, Dick B. Janssen, and Bauke W. Dijkstra*



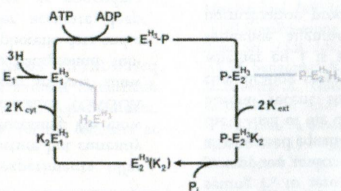
Insights into the Mechanism of Deubiquitination by JAMM Deubiquitinases from Cocrystal Structures of the Enzyme with the Substrate and Product

Rashmi K. Shrestha, Judith A. Ronau, Christopher W. Davies, Robert G. Guenette, Eric R. Strieter, Lake N. Paul, and Chittaranjan Das*



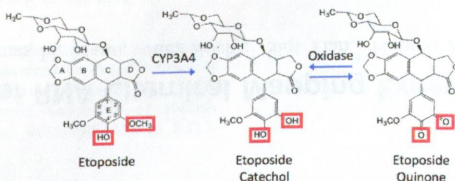
Role of Protons in the Pump Cycle of KdpFABC Investigated by Time-Resolved Kinetic Experiments

Bojana Damjanovic and Hans-Jürgen Apell*



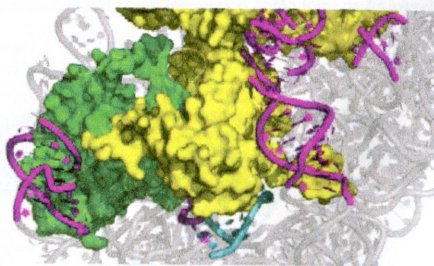
Etoposide Quinone Is a Covalent Poison of Human Topoisomerase II β

Nicholas A. Smith, Jo Ann W. Byl, Susan L. Mercer, Joseph E. Deweese, and Neil Osheroff*



Ribosome RNA Assembly Intermediates Visualized in Living Cells

Jennifer L. McGinnis and Kevin M. Weeks*



3248

5

dx.doi.org/10.1021/bi500348p

Analysis of SecA Dimerization in Solution

Andy J. Wowor, Yuetian Yan, Sarah M. Auclair, Dongmei Yu, Jun Zhang, Eric R. May, Michael L. Gross, Debra A. Kendall, and James L. Cole*

