

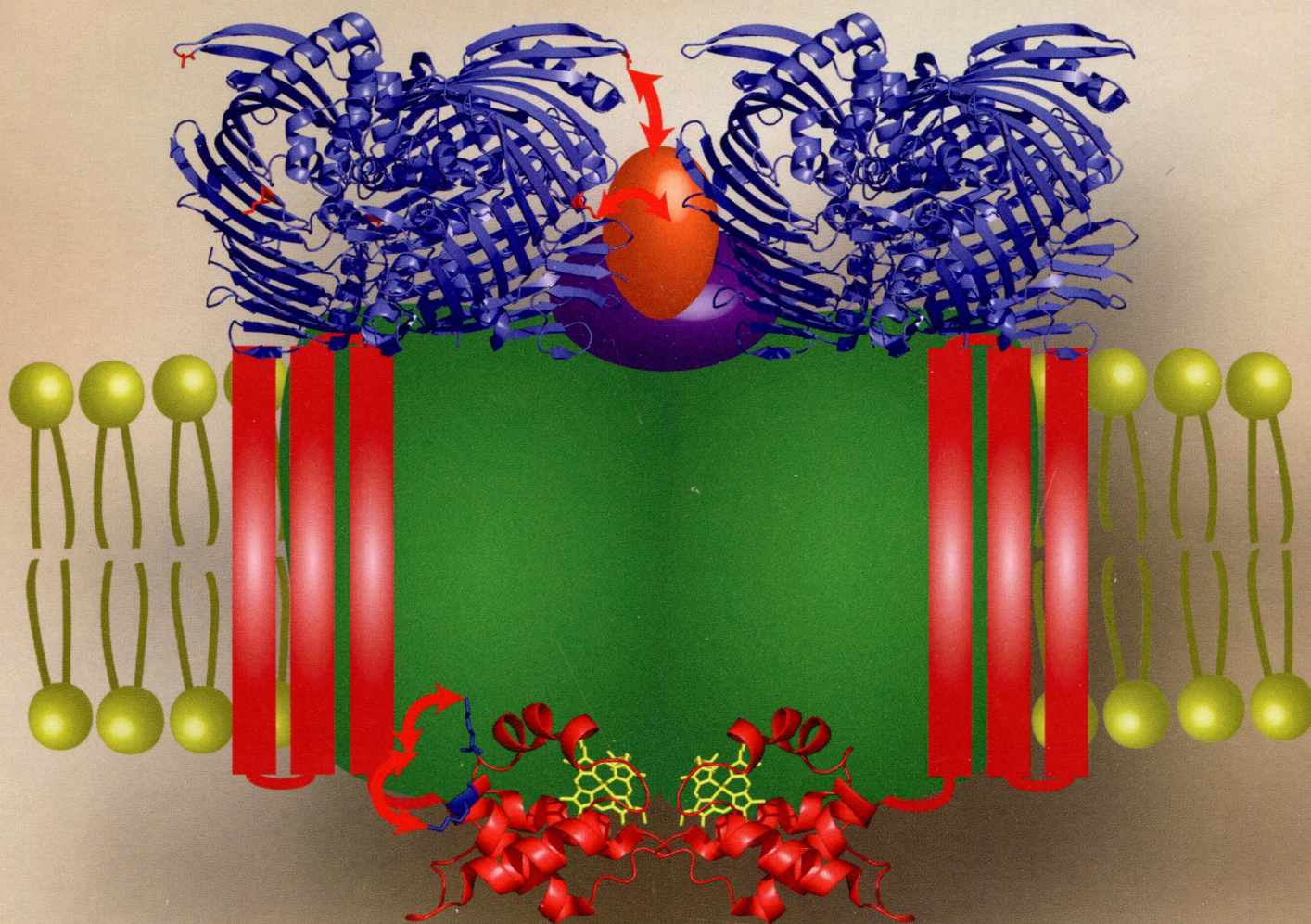
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ON THE COVER: The photosynthetic apparatus of the anoxygenic photosynthetic green sulfur bacterium *Chlorobaculum tepidum* includes the reaction center core (RCC) complex and the FMO antenna protein. The RCC complex is an FeS-type (type I) reaction 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

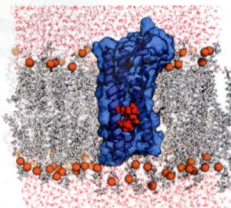
6139

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dx.doi.org/10.1021/bi500809t

The Homology Model of PMP22 Suggests Mutations Resulting in Peripheral Neuropathy Disrupt Transmembrane Helix Packing

Kathleen F. Mittendorf, Brett M. Kroncke, Jens Meiler, and Charles R. Sanders*

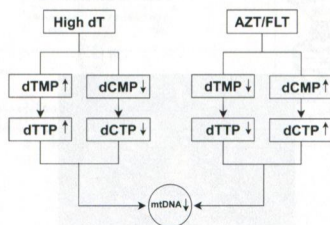


Current Topics

6142

dx.doi.org/10.1021/bi5006877

Thymidine Kinase 2 Enzyme Kinetics Elucidate the Mechanism of Thymidine-Induced Mitochondrial DNA Depletion
Ren Sun and Liya Wang*

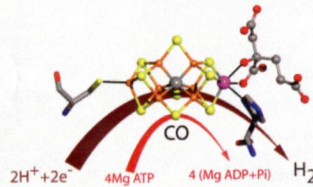


6151 **5**

[dx.doi.org/10.1021/bi500546k](https://doi.org/10.1021/bi500546k)

Another Role for CO with Nitrogenase? CO Stimulates Hydrogen Evolution Catalyzed by Variant *Azotobacter vinelandii* Mo-Nitrogenases

Karl Fisher, Nathan D. Hare, and William E. Newton*



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[dx.doi.org/10.1021/bi500710e](https://doi.org/10.1021/bi500710e)

Kinetic Analysis of Lauric Acid Hydroxylation by Human Cytochrome P450 4A11

Donghak Kim, Gun-Su Cha, Leslie D. Nagy, Chul-Ho Yun, and F. Peter Guengerich*

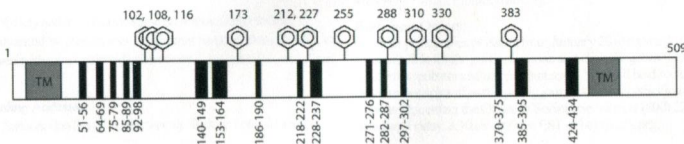


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[dx.doi.org/10.1021/bi500706x](https://doi.org/10.1021/bi500706x)

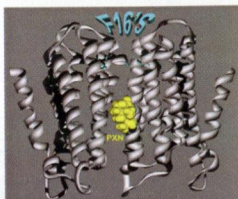
SR-BI/CD36 Chimeric Receptors Define Extracellular Subdomains of SR-BI Critical for Cholesterol Transport

Gabriella A. Kartz, Rebecca L. Holme, Kay Nicholson, and Daisy Sahoo*



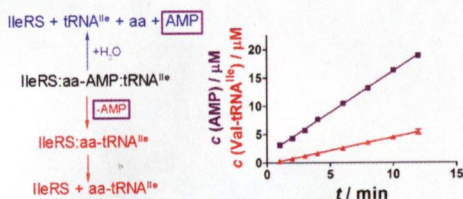
Phenylalanine in the Pore of the *Erwinia* Ligand-Gated Ion Channel Modulates PicROTOXIN Potency but Not Receptor Function

Andrew J. Thompson, Mona Alqazzaz, Kerry L. Price, David A. Weston, and Sarah C. R. Lummis*



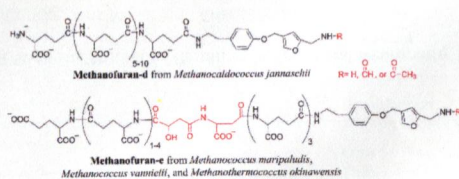
Determinants for tRNA-Dependent Pretransfer Editing in the Synthetic Site of Isoleucyl-tRNA Synthetase

Morana Dulic, John J. Perona, and Ita Gruic-Sovulj*

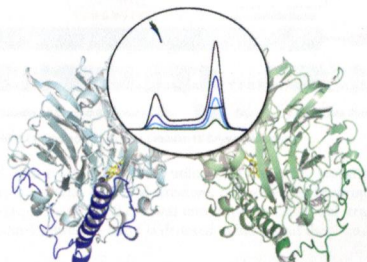


Identification of Structurally Diverse Methanofuran Coenzymes in Methanococcales That Are Both N-Formylated and N-Acetylated

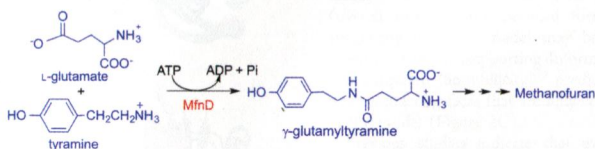
Kylie D. Allen and Robert H. White*



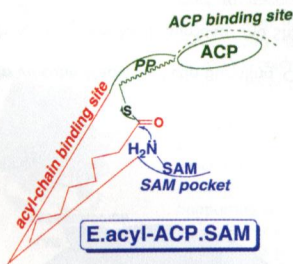
Structure and Protein–Protein Interactions of Methanol Dehydrogenase from *Methylococcus capsulatus* (Bath)
 Megan A. Culpepper and Amy C. Rosenzweig*



Identification and Characterization of a Tyramine–Glutamate Ligase (MfnD) Involved in Methanofuran Biosynthesis
 Yu Wang, Huimin Xu, Kim C. Harich, and Robert H. White*

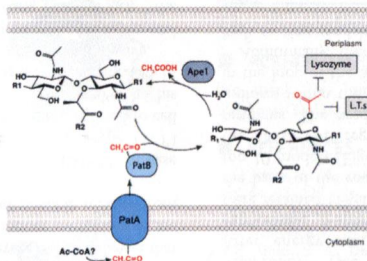


Acyl-ACP Substrate Recognition in *Burkholderia mallei* Bmal1 Acyl-Homoserine Lactone Synthase
 Aubrey N. Montebello, Ryan M. Brecht, Remington D. Turner, Miranda Ghali, Xinzhu Pu, and Rajesh Nagarajan*



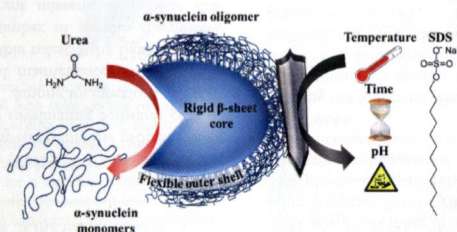
Mechanism of Action of Peptidoglycan O-Acetyltransferase B Involves a Ser-His-Asp Catalytic Triad

Patrick J. Moynihan and Anthony J. Clarke*



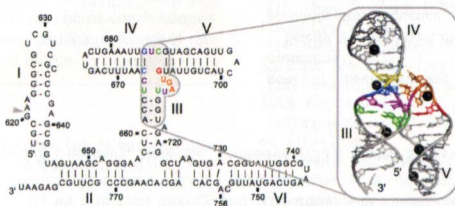
High Stability and Cooperative Unfolding of α -Synuclein Oligomers

Wojciech Paslawski, Maria Andreasen, Søren Bang Nielsen, Nikolai Lorenzen, Karen Thomsen, Jørn Døvløng Kaspersen, Jan Skov Pedersen, and Daniel E. Otzen*



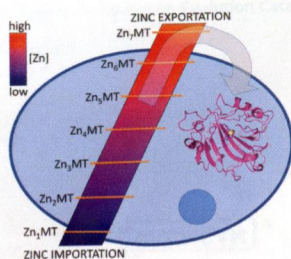
Magnetic Resonance Structure of the III–IV–V Three-Way Junction from the Varkud Satellite Ribozyme and Identification of Magnesium-Binding Sites Using Paramagnetic Relaxation Enhancement

Eric Bonneau and Pascale Legault*



The Zinc Balance: Competitive Zinc Metalation of Carbonic Anhydrase and Metallothionein 1A

Tyler B. J. Pinter and Martin J. Stillman*

**Additions and Corrections**

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dx.doi.org/10.1021/bi501135k

Correction to Phosphorylation at Y1065 in Vinculin Mediates Actin Bundling, Cell Spreading, and Mechanical Responses to Force

Caitlin E. Tolbert, Peter M. Thompson, Richard Superfine, Keith Burridge, and Sharon L. Campbell*