

Recently Published Papers in the Field of Molecular Evolution

Acta Biotheoretica

28 No. 1 1979

The Origin of Life. A Cybernetic and Informational Process. Portelli, C. (Faculty of Medicine, Department of Biophysics, 8 Dr. Petru Blvd., Bucharest, Romania) – p. 19

Agricol. Biol. Chem.

43 No. 4 1979

Amino Acid Sequences of Proteinase Inhibitors II and II' from Adzuki Beans. Yoshikawa, M. et al. (Laboratory of Biochemistry, Faculty of Agriculture, Kobe University, Nada-ku, Kobe, Hyogo 657, Japan) – p. 787

Archives of Microbiology

121 1979

The Amino Acid Sequence of the Peptide Moiety of the Pseudomurein from *Methanobacterium thermoautotrophicum*. König, H. and Kandler, O. (Botanisches Institut der Universität München, Menzinger Strasse 67, D-8000 München 19, Federal Republic of Germany) – p. 271

The Biochemical Journal

181 1979

The Isolation and Partial Sequence of Peptides Produced by Cyanogen Bromide Cleavage of Calf Thymus Non-Histone Chromosomal High-Mobility-Group Protein 2. Sequence Homology with Non-Histone Chromosomal High-Mobility-Group Protein 1. Walker, J.M. et al. (Chester Beatty Research Institute of Cancer Research, Royal Cancer Hospital, Fulham Road, London SW3 6JB, U.K.) – p. 659

Biochemistry

18 No. 13 1979

Amino Acid Sequence of California Quail Lysozyme. Effect of Evolutionary Substitutions on the Antigenic Structure of Lysozyme. Ibrahim, I.M. et al. (Department of Biochemistry, University of California, Berkeley, California 94720, U.S.A.) – p. 2736

Amino Acid Sequence of Pheasant Lysozyme. Evolutionary Change Affecting Processing of Prelysozyme. Jollès, J. et al. (Laboratory of Proteins, University of Paris V, F-75270 Paris Cedex 06, France) – p. 2744

Amino Acid Catalyzed Condensation of Purines and Pyrimidines with 2-Deoxyribose. Nelsestuen, G.L. (Department of Biochemistry, College of Biological Sciences, University of Minnesota, St. Paul, Minnesota 55108, U.S.A.) – p. 2843

Biochimica et Biophysica Acta

578 1979

A New Abnormal Human Hemoglobin: Hb Prato ($\alpha_2\beta_1$ (B12) Arg \rightarrow Ser β_2). Marinucci, M. et al. (Laboratorio di Patologia non Infettiva, Istituto Superiore di Sanità, Roma, Italy) – p. 534

579 1979

Some Properties and the Complete Primary Structures of Two Reduced and S-Carboxymethylated Polypeptides (S_5C_1 and S_5C_{10}) from *Dendraspis Jamesoui kanimosae* (Jameson's Mamba) Venom. Joubert, F.J. and Taljaard, N. (National Chemical Research Laboratory, Council for Scientific and Industrial Research, P.O. Box 395, Pretoria 0001, Republic of South Africa) – p. 228

Biophysical Chemistry

10 1979

Selection and Self-Organization of Self-Reproducing Macromolecules under the Constraint of Constant Flux. Epstein, I.R. and Eigen, M. (Max-Planck-Institut für biophysikalische Chemie, D-3400 Göttingen, Federal Republic of Germany) – p. 153

BioSystems

11 1979

Non-Random Non-Ribosomal Assembly of Amino Acids in Proteins and Proteinoids. Melius, P. (Department of Chemistry, Auburn University, Auburn, AL 36830, U.S.A.) – p. 125

Recursive Evolution. Rössler, O.E. (University Tübingen, Institut für Physikalische und Theoretische Chemie, D-7400 Tübingen, Federal Republic of Germany) – p. 193

Comparative Biochemical Physiology

63B 1979

Genome Analysis of *Amphioxus* and Speculation as to the Origin of Contrasting Vertebrate Genome Organization Patterns. Schmidtke, J. et al. (Institut für Humangenetik der Universität, D-3400 Göttingen, Federal Republic of Germany) – p. 455

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14 1979

The Complete Amino Acid Sequence of Actins from Bovine Aorta, Bovine Heart, Bovine Fast Skeletal Muscle, and Rabbit Slow Skeletal Muscle. A Protein-Chemical Analysis of Muscle Actin Differentiation. Vandekerckhove, J. and Weber, K. (Max-Planck-Institut für Biophysical Chemistry, Postfach 968, D-3400 Goettingen, Federal Republic of Germany) – p. 123

Experientia

35 1979

Amino Acid Composition and Sequence of Crinia-Angiotensin, an Angiotensin II-like Endcapeptide from the Skin of the Australian Frog *Crinia georgiana*. Erspamer, V. et al. (Istituti di Farmacologia Medica I e III dell'Università di Roma, Città Universitaria, I-00100 Roma, Italy) – p. 1132

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104 No. 2 1979

The Complete Amino Acid Sequence and the Trypsin Reactive (Inhibitory) Site of the Major Proteinase Inhibitor from the Fruits of Aubergine (*Solanum Melongena* L.). Richardson, M. (Department of Botany, University of Durham, Durham City, DH1 3LE, England) – p. 322

Fed. Proc.

38 1979

Evolutionary Relationships of the Gut Hormones. Dockray, G.J. (Physiological Laboratories, University of Liverpool, Liverpool L69 3BX, United Kingdom) – p. 2295

Hemoglobin

3 No. 2&3 1979

Abnormal Hemoglobins Caused by Deletions. A Review. Went, L.N. (Department of Human Genetics, University Medical Center, Wassenaarsewg 72, Leiden, The Netherlands) – p. 117

Hemoglobin Dunn: α_6 (A4) Aspartic Acid \rightarrow Asparagine. Jue, D.L. et al. (Hematology Division, Center For Disease Control, Public Health Service, U.S. Department of Health, Education, and Welfare, Atlanta, Georgia 30333, U.S.A.) – p. 137

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Hemoglobin Suan-Dok (α_2 ¹⁰⁹(G16)Leu-Arg) β_2): An Unstable Variant Associated with α -Thalassemia. Sanguanserm Sri, T. et al. (Department of Pediatrics and Human Genetics Unit, Faculty of Medicine, Chiangmai University, Chiangmai, Thailand) – p. 161

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360 1979

The Covalent Structure of Calf Skin Type III Collagen. I. The Amino Acid Sequence of the Amino Terminal Region of the α_1 (III) Chain (Position 1–222). Fietzek, P.P. et al. (Max-Planck-Institut für Biochemie, Martinsried bei München, Federal Republic of Germany) – p. 809

The Covalent Structure of Calf Skin Type III Collagen. II. The Amino Acid Sequence of the Cyanogen Bromide Peptide α_1 (III)CB1,8,10,2 (Positions 223–402). Dewes, H. et al. (Max-Planck-Institut für Biochemie, Martinsried bei München, Federal Republic of Germany) – p. 821

The Covalent Structure of Calf Skin Type III Collagen. III. The Amino Acid Sequence of the Cyanogen Bromide Peptide α_1 (III)CB4 (Positions 403–551). Bentz, H. et al. (Max-Planck-Institut für Biochemie, Martinsried bei München, Federal Republic of Germany) – p. 833

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86 1979

The Primary Structure of Cytoplasmic Initiator Transfer Ribonucleic Acid from *Torulopsis utilis*. Yamashiro-Matsumura, S. and Takemura, S. (Institute of Molecular Biology, School of Science, Nagoya University, Chikusa-ku, Nagoya, Aichi 464, Japan) – p. 335

The Journal of Biological Chemistry

254 No. 11 1979

The Complete Primary Structure of a Proline-rich Phosphoprotein from Human Saliva. Wong, R.S.C. et al. (Department of Biochemistry, University of Toronto, Toronto, Canada M5S 1A8) – p. 4800

254 No. 12 1979

The Purification and Sequence of a Temperature-sensitive Tryptophan tRNA. Eisenberg, S.P. et al. (Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, Colorado 80309, U.S.A.) – p. 5562

254 No. 15 1979

The Primary Structure of the α Subunit of Protocatechuate 3,4-Dioxygenase. I. Isolation and Sequence of the Tryptic Peptides. Kohlmeier, N.A. and Howard, J.B. (Department of Biochemistry, Medical School, University of Minnesota, Minneapolis, Minnesota 55455, U.S.A.) – p. 7302

The Primary Structure of the α Subunit of Protocatechuate 3,4-Dioxygenase. II. Isolation and Sequence of Overlap Peptides and Complete Sequence. Kohlmeier, N.A. and Howard, J.B. (Department of Biochemistry, Medical School, University of Minnesota, Minneapolis, Minnesota 55455, U.S.A.) – p. 7309

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Structural Homologies in Alanine-rich Acidic Ribosomal Proteins from Prokaryotes and Eucaryotes. Visentin, L.P. and Yaguchi, M. (Division of Biological Sciences, National Research Council of Canada, Ottawa, Ont., Canada K1A 0R6) – p. 719

The Amino Acid Sequence of Porcine Intestinal Calcium-Binding Protein. Hofmann, T. et al. (Departments of Biochemistry and Medicine, University of Toronto, Toronto, Ont., Canada M5S 1A8) – p. 737

The Amino Acid Sequences of the Three Heavy Chain Constant Region Domains of a Human IgG2 Myeloma Protein. Connell, G.E. et al. (Department of Biochemistry, Medical Science Building, University of Toronto, Toronto, Ont., Canada M5S 1A8) — p. 758

Cyanobacterial Evolution: Results of 16S Ribosomal Ribonucleic Acid Sequence Analyses. Bonen, L. et al. (Department of Biochemistry, Faculty of Medicine, Dalhousie University, Halifax, N.S., Canada B3H 4H7) — p. 879

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96 1979

Amino Acid Sequence Studies of Horseradish Peroxidase. Amino and Carboxyl Termini, Cyanogen Bromide and Tryptic Fragments, the Complete Sequence, and Some Structural Characteristics of Horseradish Peroxidase C. Welinder, K.G. (Institute of Biochemical Genetics, University of Copenhagen, Denmark) — p. 483

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Porcine Pancreatic Lipase. Sequence of the First 234 Amino Acids of the Peptide Chain. Bianchetta, J.D. et al. (Centre de Biochimie et de Biologie Moléculaire du Centre National de la Recherche Scientifique, Marseille, France) — p. 395

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26 No. 2 1979

Evolution in the Structure and Function of Carboxyl Proteases. Tang, J. (Laboratory of Protein Studies, Oklahoma Medical Research Foundation, and Department of Biochemistry and Molecular Biology, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma 73104, U.S.A.) — p. 93

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16 1979

The Complete Amino-Acid Sequence of a Canine Mu Chain. McCumber, L.J. and Capra, J.D. (Department of Microbiology, The University of Texas Health Science Center at Dallas, Southwestern Medical School, Dallas, TX 75235, U.S.A.) — p. 565

The Amino Acid Sequence of a Variable Region of Rabbit b4 Light Chain from an Anti-SIII Antibody: Comparison with Light Chains of the Same Sub-Group from Anti-A-Variant Carbohydrate Antibodies. Chersi, A. et al. (Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, Bethesda, MD 20014, U.S.A.) — p. 589

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The Amino Acid Sequence of the α -Chain of Human Fibrinogen. Doolittle, R.F. et al. (Department of Chemistry, University of California, San Diego, La Jolla, California, 92093, U.S.A.) – p. 464

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66 1979

Towards an Experimental Analysis of Molecular Self-Organization and Precellular Darwinian Evolution. Küppers, B. (Max-Planck-Institut für biophysikalische Chemie, D-3400 Göttingen, Federal Republic of Germany) – p. 228

Molecular Fossils of Archaeobacteria in Kerogen. Michaelis, W. and Albrecht, P. (Geologisch-Paläontologisches Institut der Universität, D-2000 Hamburg, Federal Republic of Germany) – p. 420

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7 No. 1 1979

The Nucleotide Sequence of Phenylalanine tRNA₂ of *Drosophila melanogaster*: Four Isoacceptors with One Basic Sequence. Altwegg, M. and Kubli, E. (Zoological Institute, University of Zürich-Irchel, Winterthurerstrasse 190, CH-8006 Zürich, Switzerland) – p. 93

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9 1979

Polymers Produced by Heating an Amino Acid Mixture in Sea Water Enriched with Transition Elements. Okihana, H. and Egami, F. (Mitsubishi-Kasei Institute of Life Sciences, Minamiooya, Machida-shi, Tokyo 194, Japan) – p. 171

Asymmetrical Radical Formation in D- and L-Alanines Irradiated with Yttrium-90 β -Rays. Akaboshi, M. et al. (Research Reactor Institute, Kyoto University, Kumatori, Japan) – p. 181

Mirror Symmetry Breaking in Biochemical Evolution. Morozov, L. (All-Union Research and Design Institute "Transprogress" Moscow, USSR) – p. 187

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On the Physical Origin of Biological Handedness. Kovacs, K.L. (Institute of Biophysics, Biological Research Center, Hungarian Academy of Sciences, H-6701 Szeged, Hungary) – p. 219

Compiled by L. Träger