

Recently Published Papers in the Field of Molecular Evolution

Biochemical and Biophysical Research Communications

81 No. 3 1978

Adrenocorticotropin 53. The Amino Acid Sequence of the Hormone from the Ostrich Pituitary Gland. Choh Hao Li et al. (Hormone Research Laboratory, University of California, San Francisco, San Francisco, California 94143) – p. 900

The Biochemical Journal

171 1978

Sequence of the Full-Length Immunoglobulin κ -Chain of Mouse Myeloma MPC 11. George P. Smith. (Division of Biological Sciences, University of Missouri, Tucker Hall, Columbia, MO 65201, U.S.A., and Departments of Genetics and Medical Genetics, University of Wisconsin, Madison, WI 53706, U.S.A.) – p. 337

Biochemistry

16 No. 26 1977

Partial Amino Acid Sequence of Brain Actin and Its Homology with Muscle Actin. Renne Chen Lu and Marshall Elzinga. (Department of Muscle Research, Boston Biomedical Research Institute, and Department of Neurology, Harvard Medical School, Boston, Massachusetts 02114 (R.C.L. and M. E.), and the Department of Biology, Brookhaven National Laboratory, Upton, New York 11973 (M.E.) – p. 5801

17 No. 6 1978

Primary Structure of the λ Repressor. Sauer, Robert T. and Andereg, Robert. (Biological Laboratories, Harvard University, Cambridge, Massachusetts 02138 (R.T.S.), and the Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139 (R.A.) – p. 1092

17 No. 7 1978

Dihydrofolate Reductase: The Amino Acid Sequence of the Enzyme from a Methotrexate-Resistant Mutant of *Escherichia coli*. Carl D. Bennett, et al. (Department of Medicinal Chemistry, Merck Sharp & Dohme Research Laboratories, West Point, Pennsylvania 19486) – p. 1328

Homogeneous Rabbit Immunoglobulin Lacking Group a Allotypes: Amino Acid Sequence Analysis of the Heavy Chain. Alan P. Johnstone et al. (The Rockefeller University, New York, New York 10021) – p. 1337

17 No. 9 1978

Nucleotide Sequence of Phenylalanine Transfer RNA from *Schizosaccharomyces pombe*: Implications for Transfer RNA Recognition by Yeast Phenylalanyl-tRNA Synthetase. Thomas McCutchan et al. (Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, Connecticut 06520) – p. 1622

Amino Acid Sequence of the Variable Region of the Light (λ) Chain from Human Myeloma Cryoimmunoglobulin IgG Hil. Jose A. Lopez de Castro et al. (Department of Biophysics, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205) – p. 1718

Complete Covalent Structure of Human β -Thromboglobulin. Geoffrey S. Begg et al. (St. Vincent's School of Medical Research (G.S.B. and F.J.M.) and University of Melbourne Department of Medicine (C.N.C), St. Vincent's Hospital, Fitzroy, Melbourne, Victoria 3065, Australia, and Edinburg & South East Scotland Regional Blood Transfusion Service (D.S.P.), Royal Infirmary, Edinburg, United Kingdom) – p. 1739

Biochimica et Biophysica Acta

532 No. 1 1978

The Amino Acid Sequence of Cytochrome *c* from the Blowfly *Lucilia Cuprina*. D.C. Shaw et al. (Departments of Biochemistry and Physical Biochemistry, John Curtin School of Medical Research and Department of Biochemistry, School of General Studies Australian National University, Canberra, A.C.T. (Australia)) – p. 179

A New Hemoglobin Variant HB Yatsushiro $\alpha_2^A \beta_2^{60 \text{ Val} \rightarrow \text{Leu}}$. Tadashi Kagimoto et al. (Second Department of Internal Medicine and the Second Department of Biochemistry, Kumamoto University Medical School, Kumamoto 860 (Japan)) – p. 195

533 No. 1 1978

Amino Acid Sequence of Rabbit Carbonic Anhydrase II. Robert E. Ferrell et al. (Department of Human Genetics, University of Michigan, Ann Arbor, Mich. 48109 (U.S.A.)) – p. 1

Histone H2B Variants from the Erythrocytes of an Amphibian, a Reptile and a Bird. P. Van Helden et al. (Department of Biochemistry, C.S.I.R., Chromatin Research Unit, University of Cape Town (Republic of South Africa)) – p. 278

533 No. 2 1978

The Myoglobin of an Echidna (*Tachyglossus aculeatus aculeatus*). O. Castillo et al. (University Department of Clinical Biochemistry, Addenbrooke's Hospital, Hills Road, Cambridge CB2 2QR (U.K.)) – p. 289

Properties of Hemoglobin G. Ferrara ($\beta_{57}(E1) \text{Asn} \rightarrow \text{Lys}$). B. Giardina et al. (Institutes of Chemistry and Biochemistry, Faculty of Medicine, C.N.R. Center of Molecular Biology, University of Rome, and Istituto Superiore di Sanita, Rome (Italy)) – p. 1

Amino Acid Sequence of Chicken Fibrinopeptide A. Takashi Takagi et al. (Institute for Protein Research, Osaka University, Suita, Osaka 565 (Japan)) – p. 161

Biochimie

60 1978

Primary structure of chicken erythrocyte histone H2A. B. Laine et al. (Unité 124 de l'Institut National de la Santé et de la Recherche Médicamentaire (U. 124 INSERM), Institut de Recherches sur le Cancer. B.P. n° 35 67, 59020 Lille Cédex (France)) – p. 147

Cancer Research

38 No. 3 1978

Amino-terminal Sequence of a Carcinoembryonic Antigen-like Glycoprotein Isolated from the Colonic Lavages of Healthy Individuals. John E. Shively et al. (Division of Immunology, City of Hope National Medical Center, Duarte, California 91010 (J.E.S., C.W.T., M.L.E.), and Gastroenterology Unit, Mayo Clinic and Mayo Foundation, Rochester, Minnesota 55901 (V.L.W.G.)) – p. 503

Cell

13 No. 3 1978

Conservation of the Primary Structure at the 3' End of 18S rRNA from Eucaryotic Cells. Otto Hagenbüchle et al. (Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, Connecticut 06510) – p. 551

Comparative Biochemical Physiology

59B No. 4 1978

Fingerprint Correspondence of Hemoglobins and the Relationships of Sea Snakes. Shou-Hsian Mao et al. (Department of biomorphics, National Defense Medical Center, Taipei (107), Taiwan) – p. 353

Comparison of Ribosomal RNA of *Bombyx mori* with that of *Antberaea eucalypti* by the Hybridization to DNA; a Trial of Rapid Determination of Divergence Time of Ribosomal Gene. Nobuyuki Hamada et al. (Laboratory of Sericultural Chemistry, Faculty of Agriculture, Kyushu University 46-02, Fukuoka 812, Japan) – p. 369

FEBS Letters

88 No. 1 1978

On the Calcium-binding Ability of the Synthetic Evolutionary Ancestor of Calcium-binding Proteins. E.E. Maximov et al. (Institute of Protein Research, USSR Academy of Sciences, 142292 Poustchino, Moscow Region, USSR) – p. 80

Hemoglobin Ty Gard ($\alpha_2^A\beta_2$ 124 (H₂) Pro→Gln), A stable high O₂ affinity variant at the $\alpha_1\beta_1$ contact. E. Bursaux et al. (Unités de Recherches INSERM U,27, Hôpital Foch, 92150 Suresnes and U,91, Hôpital Henri Mondor, Créteil, France) – p. 155

88 No. 2 1978

Primary Structure of Protein S19 from the Small Ribosomal Subunit of *Escherichia coli*. Makoto Yaguchi and H.G. Wittmann (Division of Biological Sciences, National Research Council of Canada, Ottawa, Canada) – p. 227

α -1-Antitrypsin: Structural Relationships of the Substitutions of the S and Z Variants. Maurice C. Owen et al. (Department of Clinical Biochemistry, University of Cambridge, Addenbrooke's Hospital, Hills, Road, Cambridge, CB2 2QR, England) – p. 234

89 No. 1 1978

Amino Acid Sequence of Neurotoxin V from the Scorpion *Leiurus quinquestriatus quinquestriatus*. Charles Kopeyan et al. (Groupe U 172 INSERM, Laboratoire de Biochimie, Faculté de Médecine, Secteur Nord, Boulevard Pierre Dramard, 13326 Marseille Cédex 3, France) – p. 54

91 No.1 1978

Primary structure of Protein L14 Isolated from *Escherichia coli* Ribosomes. Tomonori Morinaga et al. (Laboratory of Biochemistry, Faculty of Agriculture, Kyushu University, Fukuoka, Japan) – p. 74

Hemoglobin

1 No. 7 1977

Variation in Hemoglobin A₂. F. Vella. (Department of Biochemistry, College of Medicine, University of Saskatchewan, Saskatoon, Sask., Canada S7N 0W0) – p. 619

1 No. 8 1977

Hemoglobin Gavello - $\alpha_2\beta_2$ 47 (CD6) Asp → Gly, a New Hemoglobin Variant from Polesine (Italy). M. Marinucci et al. (Laboratorio di Patologia non Infettiva, Istituto Superiore di Sanita, Rome, Italy. Ospedale Civile S. Maria della Misericordia, Rovigo, Italy) – p. 771

Hemoglobin Thailand (α 56 (E 5) Lys → Thr): a New Abnormal Human Hemoglobin. S. Pootrakul et al. (Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Nutrition Division, Department of Health, Ministry of Public Health, Bangkok, Thailand) – p. 781

Hemoglobin Lufkin: β 29 (B11) Gly → Asp, an Unstable Hemoglobin Variant Involving an Internal Amino Acid Residue. Robert M. Schmidt et al. (Hematology Division, Center for Disease Control, Public Health Service, Atlanta, Georgia 30333, Texas Department of Health Resources, Austin, Texas 78756) – p. 799

2 No. 1 1978

Hb J Camagüey α_2 ¹⁴¹ (HC3) Arg → Gly β_2 : A New Abnormal Human Hemoglobin. G. Martinez et al. (Instituto de Hematologia e Inmunologia Altahabana, La Habana 8, Cuba) – p. 47

Hoppe-Seyler's Z. Physiol. Chem.

359 No. 1 1978

The Amino Acid Sequences of the Two Main Components of Adult Hemoglobin from Orangutan (*Pongo pygmaeus*). Tetsuo Maita et al. (Department of Biochemistry, Nagasaki University School of Medicine, Nagasaki, Japan and Department of Anatomy, Wayne State University, School of Medicine, Detroit, Michigan, U.S.A.) – p. 129

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The Amino Acid Sequences of the Tryptic, Chymotryptic and Peptic Peptides from the L-2 Light Chain of Rabbit Skeletal Muscle Myosin. Genji Matsuda et al. (Department of Biochemistry, Nagasaki University School of Medicine, Nagasaki, Japan) — p. 629

Canadian Journal of Biochemistry

56 No. 1 1978

A proposed nucleotide sequence for the 5S ribosomal ribonucleic acid of rainbow trout (*Salmo gairdneri*). Kenneth L. Roy. (Department of Microbiology, University of Alberta, Edmonton, Alta., Canada T6G 2E9) — p. 60

European Journal of Biochemistry

86 No. 2 1978

Cytochrome *c* from *Schizosaccharomyces pombe*, 2. Amino-Acid Sequence. Anne-Marie Simon-Becam et al. (Centre de Génétique Moléculaire du Centre National de la Recherche Scientifique, Gif-sur-Yvette) — p. 407

87 No. 1 1978

Amino-Acid Sequence of Citrate-Lyase Acyl-Carrier Protein from *Klebsiella aerogenes*. Konrad Beyreuther et al. (Institut für Genetik der Universität zu Köln, and Fachbereich Biologie der Universität Regensburg) — p. 101

Snake Venoms, the Amino-Acid Sequence of Trypsin Inhibitor E of *Dendroaspis polylepsis polylepsis* (Black Mamba) Venom. Francois J. Joubert and Daniel J. Strydom. (National Chemical Research Laboratory, Council for Scientific and Industrial Research Pretoria) — p. 191

The Nucleotide Sequences of 5.8-S Ribosomal RNA from *Xenopus laevis* and *Xenopus borealis*. Peter J. Ford and Tom Mathieson. (Department of Molecular Biology, University of Edinburg) — p. 199

International Journal of Peptide and Protein Research

11 No. 4 1978

Chromosomal Proteins, the Amino Terminal Sequence of High Mobility Group Non-Histone Chromosomal Protein, HMG 14, Showing Sequence Homologies with Two Other Chromosomal Proteins. John M. Walker et al. (Chester Beatty Research Institute, of Cancer Research, Royal Cancer Hospital, Fulham Road, London, England) — p. 301

Journal of Bacteriology

133 No. 3 1978

Evolution of Ribosomal Proteins in *Enterobacteriaceae*. Hiroshi Hori and Syozo Osawa. (Department of Biophysics and Biochemistry, Research Institute for Nuclear Medicine and Biology, Hiroshima University, Hiroshima, Japan 734) – p. 1089

Journal of Biochemistry

83 No. 3 1978

Amino Acid Sequence of *Aphanotbece sacrum* Ferredoxin II (Minor Component), Structural Characteristics and Evolutionary Implications. Toshiharu Hase et al. (Department of Biology, Faculty of Science, Osaka University, Toyonaka, Osaka 560) – p. 761

83 No. 4 1978

Nucleotide Sequence of Leucine Transfer RNA 1 from *Candida (Torulopsis) utilis*. Akira Murasugi and Shosuke Takemura. (Institute of Molecular Biology, Faculty of Science, Nagoya University, Chikusa-ku, Nagoya, Aichi 464) – 1029

Amino Acid Sequence around the Pyridoxal 5'-Phosphate Binding Site in Potato Phosphorylase. Kenichi Nakano et al. (The Institute of Scientific and Industrial Research, Osaka University, Suita, Osaka 565, and Department of Biology, Faculty of Science, Osaka University, Toyonaka, Osaka 560) – p. 1085

The Journal of Biological Chemistry

253 No. 8 1978

The Amino Acid Sequence of Human Insulin-like Growth Factor I and Its Structural Homology with Proinsulin. Ernst Rinderknecht and Rene E. Humbel. (From the Biochemisches Institut der Universität Zürich, CH-8028 Zürich, Switzerland) – p. 2769

Journal of Theoretical Biology

71 No. 3 1978

The Poly(A) Segment of mRNA: (1) Evolution and Function and (2) The Evolution of Viruses. Richard K. Carlin. (University of Houston, Department of Biophysical Sciences, Houston, Texas 77004, U.S.A.) – p. 323

Identification of Phylogenetic Trees of Minimal Length. M.D. Hendy et al. (Department of Mathematics, and Department of Botany and Zoology, Massey University, Palmerston North, New Zealand) – p. 441

Evolution, Complexity, and Fitness. C. Castrodeza – p. 469

Evolutionary Processes Possibly Limiting the Kinds of Amino Acids in Protein to Twenty: A Review. Duane L. Rohlfing and Mary A. Saunders. (Department of Biology, University of South Carolina, Columbia, South Carolina 29208, U.S.A.) – p. 487

72 No. 1 1978

The Detection of Amino Acid Sequence Homology: A New Scoring Method Based on the Genetic Code with Allowance for Redundancy. Paul C. Engel. (Department of Biochemistry, University of Sheffield, Western Bank, Sheffield S10 2TN, England) – p. 1

Information Transformations in Molecular Evolution. Jeffrey S. Wicken. (Department of Biochemistry, Penn. State University – Behrend College, Erie, Pennsylvania 16510, U.S.A.) – p. 191

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Warfare and Hominid Brain Evolution. Roger Pitt. (11 Summit Avenue, Catskill NY 12414, U.S.A.) – p. 551

Journal of Molecular Biology

120 No. 2 1978

Complete Primary Structure of the Small Outer Capsid (soc) Protein of Bacteriophage T4. Rudolf K. L. Bijlenga et al. (Department of Microbiology, Biozentrum der Universität Basel, Klingelbergstrasse 70, 4056 Basel, Switzerland and Department of Biophysics Faculty of Science, Kyoto University, Sakyo, Kyoto, Japan) – p. 249

121 No. 1 1978

Nucleotide Sequence of the Promoter – Operator Region of the Tryptophan Operon of *Escherichia coli*. G. N. Bennett et al. (Department of Biological Sciences, Stanford University, Stanford, Calif. 94305, U.S.A.) – p. 113

Nucleotide Sequence of the Promoter – Operator Region of the Tryptophan Operon of *Salmonella typhimurium*. G. N. Bennett et al. (Department of Biological Sciences, Stanford University, Stanford, Calif. 94305, U.S.A.) – p. 139

Comparison of the Nucleotide Sequences of the Initial Transcribed Regions of the Tryptophan Operons of *Escherichia coli* and *Salmonella typhimurium*. Frank Lee et al. (Department of Biological Sciences, Stanford University, Stanford, Calif. 94305, U.S.A.) – p. 193

121 No. 3 1978

Sequence and Evolution of Mouse Satellite DNA. R. J. Shmookler Reis and P. A. Biro. (Medical Research Council Mammalian Genome Unit, University of Edinburgh, Department of Zoology, West Mains Road, Edinburgh, Scotland) – p. 357

Nature

273 No. 5658 1978

Complete nucleotide sequence of SV40 DNA. W. Fiers et al. (Laboratory of Molecular Biology, University of Ghent, Belgium) – p. 113

Nucleic Acids Research

5 No. 5 1978

Collection of published tRNA sequences. M. Sprinzl et al. (Department of Chemistry, Max-Planck-Institut für Experimentelle Medizin, Hermann-Rein-Str. 3, D-3400 Göttingen, GFR) – p. 15

Philosophical Transactions of the Royal Society of London

283 No. 995 1978

On the Evolution of Myoglobin. A. E. Romero-Herrera et al. (University Department of Clinical Biochemistry, Addenbrooke's Hospital, Hills Road, Cambridge, CB2 2QR, U.K.) – p. 61

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75 No. 5 1978

A general method to assess similarity of protein structures, with applications to T4 bacteriophage lysozyme. Stephen J. Remington and Brian W. Matthews. (Institute of Molecular Biology and Department of Physics, University of Oregon, Eugene, Oregon 97403) – p. 2180

Science

200 No. 4341 1978

The Genome of Simian Virus 40. V. B. Reddy et al. (Department of Human Genetics or the Department of Medicine (or both), at the Yale University School of Medicine, New Haven, Connecticut 06510) – p. 494

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Zeitschrift für Naturforschung

32c No. 11/12 1977

Origins of the First Cell, a New Model for the Spontaneous Formation of the First Living Cell Based on a Novel Approach. Semih Erhan. (2101 Chestnut Street, Philadelphia) – p. 1003

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