

Recently Published Papers in the Field of Molecular Evolution

GENERAL ASPECTS

Journal of Theoretical Biology

105 No. 2 1983

Evolutionary Changes in the Information Content of Polypeptides. Matsuno, K. (Nagaoka, Japan) - p. 185

Trends in Biochemical Sciences

9 No. 1 1984

Fossil Remnants of a Primeval Code in All Forms of Life? Shepherd, J. C. W. (Basel, Switzerland) - p. 8

9 No. 2 1984

Fatty Acid Synthase - An Example of Protein Evolution by Gene Fusion. McCarthy, A. D. and Hardie, D. G. (Dundee, UK) - p. 60

PRIMARY STRUCTURES OF NUCLEIC ACIDS

Biochemical and Biophysical Research Communications

117 No. 2 1983

Nucleotide Sequence of a cDNA Clone for Human Aldolase B. Besmond, C. et al. (Paris, France) - p. 601

118 No. 1 1984

Characterization of a Sheep Elastin cDNA Clone Containing Translated Sequences. Yoon, K. et al. (Philadelphia, USA) - p. 261

Biochemistry

22 No. 25 1983

Nucleotide Sequence of the *Dictyostelium discoideum* Small-Subunit Ribosomal Ribonucleic Acid Inferred from the Gene Sequence: Evolutionary Implications. McCarroll, R. et al. (Denver, USA) - p. 5858

Biochimie

65 No. 10 1983

Distribution of Family-Specific Sequence Homologies in Six Families of Isoaccepting tRNAs. Thuriaux, P. (Lausanne, Switzerland) - p. 585

DNA

2 No. 4 1983

Nucleic Acid Sequence Database V: Completely Sequenced Genomes. Chen, H. R. et al. (Washington, USA) - p. 275

EMBO Journal

2 No. 12 1983

Import of Proteins into Mitochondria: Nucleotide Sequence of the Gene for a 70-kd Protein of the Yeast Mitochondrial Outer Membrane. Hase, T. et al. (Basel, Switzerland) - p. 2169

Tupaia (Tree Shrew) Adenovirus DNA: Sequence of the Left-hand Fragment Corresponding to the Transforming Early Region of Human Adenoviruses. Brinckmann, U. et al. (Heidelberg, FRG) - p. 2185

Molecular Cloning of the Avian Acute Transforming Retrovirus MH2 Reveals a Novel Cell-Derived Sequence (*v-mil*) in Addition to the *myc* Oncogene. Coll, J. et al. (Lille, France) - p. 2189

DNA Sequence of the U_S Component of the Varicella Zoster Virus Genome. Davison, A. J. (Glasgow, UK) - p. 2203

Sequence Analysis of Gardner-Arnstein Feline Leukaemia Virus Envelope Gene Reveals Common Structural Properties of Mammalian Retroviral Envelope Genes. Wunsch, M. et al. (Freiburg, FRG) - p. 2239

The Nucleotide Sequence of Cowpea Mosaic Virus B RNA. Lomonosoff, G. P. and Shanks, M. (Norwich, UK) - p. 2253

Sequence Homologies Within the 5' End Region of the Estrogen-Controlled Vitellogenin Gene in *Xenopus* and Chicken. Walker, P. et al. (Lausanne, Switzerland) - p. 2271

DNA Sequence and Genome Organization of Genital Human Papillomavirus Type 6b. Schwarz, E. et al. (Freiburg, FRG) - p. 2341

Cloning and Structure of the Human Interleukin 2 Chromosomal Gene. Degraeve, W. et al. (Ghent, Belgium) - p. 2349

Sequence of the Murine and Human Cellular *myc* Oncogenes and Two Modes of *myc* Transcription Resulting from Chromosome Translocation in B Lymphoid Tumours. Bernard, O. et al. (Parkville, Australia) - p. 2375

FEBS Letters

166 No. 2 1984

Nucleotide Sequence of the 5S rRNA Gene and Flanking Regions in the Cyanobacterium, *Anacystis nidulans*. Douglas, S. E. and Doolittle, W. F. (Halifax, Canada) - p. 307

Gene

25 No. 1 1983

The Nucleotide Sequence of a New Human Repetitive DNA Consists of Eight Tandem Repeats of 66 Base Pairs. Yang, R. et al. (Ithaca, USA) - p. 59

Sequence Homology Between the Tetracycline-Resistance Determinants of *Tn10* and pBR322. Nguyen, T. T. et al. (Irvine, USA) - p. 83

Nucleotide Sequence of the Anemic Pigeon Alpha-Globin Gene. Structural Rearrangements in the Cloned cDNA. Pletnev, A. G. et al. (Moscow, USSR) - p. 93

Cloning and Characterization of the Ornithine Carbamoyltransferase Gene from *Aspergillus nidulans*. Berse, B. et al. (Warsaw, Poland) - p. 109

25 No. 2/3 1983

Plasmid-Encoded Hygromycin B Resistance: The Sequence of Hygromycin B Phosphotransferase Gene and Its Expression in *Escherichia coli* and *Saccharomyces cerevisiae*. Gritz, L. and Davies, J. (Waltham, USA) - p. 179

Nucleotide Sequence of the Regulatory Region of the *uvrD* Gene of *Escherichia coli*. Finch, P. and Emmeron, P. T. (Newcastle upon Tyne, UK) - p. 317

The Nucleotide Sequence and Derived Amino Acid Sequence of cDNA Coding for Mouse Carbonic Anhydrase II. Curtis, P. J. et al. (Philadelphia, USA) - p. 325

The Journal of Biological Chemistry

258 No. 23 1983

Recombination in Simian Virus 40-Infected Cells. Structure of Naturally Arising Variants *ev-2114*, *ev-2102*, and *ev-1110*. Sheflin, L. et al. (Buffalo, USA) - p. 14315

Yeast Carbamyl Phosphat Synthetase. Structure of the Yeast Gene and Homology to *Escherichia coli* Carbamyl Phosphate Synthetase. Lusty, C. J. et al. (New York, USA) - p. 14466

Phylogenetic Conservation of a Class III Major Histocompatibility Complex Antigen, Factor B. Isolation and Nucleotide Sequence of Mouse Factor B cDNA Clones. Sackstein, R. et al. (Boston, USA) - p. 14693

258 No. 24 1983

Euglena gracilis Chloroplast Ribosomal RNA Transcription Units. Nucleotide Sequence Polymorphism in 5S rRNA Genes and 5S rRNAs. Karabin, G. D. et al. (Boulder, USA) - p. 14790

Structure of the *metJBLF* Cluster in *Escherichia coli* K12. Sequence of the *metB* Structural Gene and of the 5'- and 3'-Flanking Regions of the *metBL* Operon. Duchange, N. et al. (Paris, France) - p. 14868

A Uniquely Conserved Regulatory Signal is Found Around the Transcription Initiation Site in Three Different Collagen Genes. Yamada, Y. et al. (Bethesda, USA) - p. 14914

Boundaries of Gene Conversion within the Duplicated Human α -Globin Genes. Concerted Evolution by Segmental Recombination. Michelson, A. M. and Orkin, S. H. (Boston, USA) - p. 15245

European Journal of Biochemistry

138 No. 1 1984

The Biosynthesis of the Ubiquinol-Cytochrome *c* Reductase

Complex in Yeast. DNA Sequence Analysis of the Nuclear Gene Coding for the 14-kDa Subunit. DeHaan, M. et al. (Amsterdam, The Netherlands) - p. 169

The Journal of Immunology

132 No. 1 1984

Complete Sequence of a Cloned cDNA Encoding Rabbit Secreted μ -Chain of VHA2 Allotype. Comparisons with VHA1 and Membrane μ Sequences. Bernstein, K. E. et al. (Bethesda, USA) - p. 490

Journal of Theoretical Biology

105 No. 2 1983

Human Mitochondrial Genome and the Evolution of Methionine Transfer Ribonucleic Acids. Mikelsaar, R. (Tartu, USSR) - p. 221

Molecular and General Genetics

192 No. 3 1983

Localization and Nucleotide Sequence of the *bom* Region of CLD-DP13. Snijders, A. et al. (Amsterdam, The Netherlands) - p. 444

The Intron of the Mitochondrial 21S rRNA Gene. Distribution in Different Yeast Species and Sequence Comparison Between *Kluyveromyces thermotolerans* and *Saccharomyces cerevisiae*. Jacquier, A. and Dujon, B. (Gif sur Yvette, France) - p. 487

Nature

307 No. 5947 1984

DNA Sequence of the Maize Transposable Element *Dissociation*. Döring, H. P. et al. (Köln, FRG) - p. 127

Primary Structure Homology Between the Product of Yeast Cell Division Control Gene *CDC28* and Vertebrate Oncogenes. Lorincz, A. T. and Reed, S. I. (Santa Barbara, USA) - p. 183

Similarity of the *CinI* Repetitive Family of *Zea mays* to Eukaryotic Transposable Elements. Shepherd, N. S. et al. (Köln, FRG) - p. 185

307 No. 5948 1984

Molecular Cloning of cDNA for Murine Interleukin-3. Fung, M. C. et al. (Canberra, Australia) - p. 233

Transposition of *Tn554* Does not Generate a Target Duplication. Murphy, E. and Löfdahl, S. (New York, USA) - p. 292

Plasmid

10 No. 3 1983

Sequence Homology Between *IncN* Group Plasmids. Konarska-Kozłowska, M. and Iyer, V. N. (Ottawa, Canada) - p. 211

Complete Nucleotide Sequence of pT181, a Tetracycline-Resistance Plasmid from *Staphylococcus aureus*. Khan,

S. A. and Novick, R. P. (Pittsburgh, USA) - p. 251

Proceedings of the National Academy of Sciences of the USA

80 No. 23 1983

7S-K Nuclear RNA from Simian Virus 40-Transformed Cells Has Sequence Homology to the Viral Early Promoter. Sohn, U. et al. (Fredericton, Canada) - p. 7090

Structure and Expression of the *dnaQ* Mutator and the RNase H Genes of *Escherichia coli*: Overlap of the Promoter Regions. Maki, H. et al. (Fukuoka, Japan) - p. 7137

DNA Sequences Near the Site of Reciprocal Recombination Between a *c-myc* Oncogene and an Immunoglobulin Switch Region. Dunnick, W. et al. (Ann Arbor, USA) - p. 7269

Sequences Essential for Transposition at the Termini of IS50. Sasakawa, C. et al. (St. Louis, USA) - p. 7293

Point Mutations and DNA Rearrangements 5' to the Inducible *ga-2* Gene of *Neurospora* Allow Activator Protein-Independent Transcription. Geever, R. P. et al. (Athens, USA) - p. 7298

Exon-Intron Organization and Complete Nucleotide Sequence of a Human Major Histocompatibility Antigen DC8 Gene. Larhammar, D. et al. (Uppsala, Sweden) - p. 7313

PRIMARY STRUCTURES OF PROTEINS

Archives of Biochemistry and Biophysics

228 No. 1 1984

Human Skeletal-Muscle Aldolase: N-Terminal Sequence Analysis of CNBr- and o-Iodosobenzoic Acid-Cleavage Fragments. Freemont, P. S. et al. (Aberdeen, UK) - p. 342

Biochemical and Biophysical Research Communications

117 No. 3 1983

Isolation and Characterization of the Bovine Hypothalamic Growth Hormone Releasing Factor. Esch, F. et al. (La Jolla, USA) - p. 772

The Amino Acid Sequence of an Atrial Peptide with Potent Diuretic and Natriuretic Properties. Flynn, T. G. et al. (Kingston, Canada) - p. 859

118 No. 1 1984

Purification and Complete Amino Acid Sequence of a α -Human Atrial Natriuretic Polypeptide (α -hANP). Kangawa, K. and Matsuo, H. (Miyazaki, Japan) - p. 131

Purification and Sequence of an Opioid Peptide Derived from Ovine Proenkephalin. Micanovic, R. et al. (Laramie, USA) - p. 299

Amino Acid Sequence of the Carboxy-Terminal End of Human Erythrocyte Glucose-6-Phosphate Dehydrogenase. Descalzi-Cancedda, F. et al. (Naples, Italy) - p. 332

The Biochemical Journal

217 No. 3 1984

Cystatin. Amino Acid Sequence and Possible Secondary Structure. Schwabe, C. et al. (Charleston, USA) - p. 813

Biochemistry

22 No. 25 1983

Nuclear Magnetic Resonance Studies of Two-Iron-Two-Sulfur Ferredoxins. 2. Determination of the Sequence of *Anabaena variabilis* Ferredoxin II, Assignment of Aromatic Resonances in Proton Spectra, and Effects of Chemical Modifications. Chan, T.-M. et al. (West Lafayette, USA) - p. 5988

Biochimica et Biophysica Acta

784 No. 1 1984

The Primary Sequence of Human Pancreatic Colipase. Sternby, B. et al. (Lund, Sweden) - p. 75

Comparative Biochemistry and Physiology

76B No. 4 1983

Fibronectin in Evolution: Presence in Invertebrates and Isolation from *Microciona prolifera*. Akiyama, S. K. and Johnson, M. D. (Bethesda, USA) - p. 687

FEBS Letters

165 No. 1 1984

Complete Amino Acid Sequence of Glucose Dehydrogenase from *Bacillus megaterium*. Jany, K.-D. et al. (Stuttgart, FRG) - p. 6

The Myoglobin of Primates: The Night Monkey, *Aotes trivirgatus* (Cebidae, Platyrrhini, Anthropoidea). Heinbokel, N. and Lehmann, H. (Cambridge, UK) - p. 46

165 No. 2 1984

The Complete Amino Acid Sequence of Hirudin, a Thrombin Specific Inhibitor. Application of Colour Carboxymethylation. Dodt, J. et al. (München, FRG) - p. 180

An Amino Acid Substitution that Blocks the Deacylation Step in the Enzyme Mechanism of Penicillin-Binding Protein 5 of *Escherichia coli*. Broome-Smith, J. and Spratt, B. G. (Brighton, UK) - p. 185

Extended Superfamily of Short Alcohol-Polyol-Sugar Dehydrogenases: Structural Similarities Between Glucose and Ribitol Dehydrogenases. Jörnvall, H. et al. (Stockholm, Sweden) - p. 190

166 No. 1 1984

Amino Acid Sequence of the Oligomycin Sensitivity-Confering Protein (OSCP) of Beef-Heart Mitochondria and Its Homology with the δ -Subunit of the F_1 -ATPase of *Escherichia coli*. Ovchinnikov, Y. A. et al. (Moscow, USSR) - p. 19

Structural Homologies Between the Amino Acid Sequence of *Clostridium pasteurianum* MoFe Protein and the DNA Sequences of *nifD* and *K* Genes of Phylogenetically Diverse Bacteria. Hase, T. et al. (Osaka, Japan) - p. 39

166 No. 2 1984

Isolation and Amino Acid Sequence of a Mating Pheromone Produced by Mating Type α Cells of *Saccharomyces kluyveri*. Sakurai, A. et al. (Saitama, Japan) - p. 339

The Amino Acid Sequence of Two Small Ribosomal Proteins from *Bacillus stearothermophilus*. Tanaka, I. et al. (Berlin, FRG) - p. 343

Amino Acid Sequence of Human Factor D of the Complement System. Similarity in Sequence Between Factor D and Proteases of Non-Plasma Origin. Johnson, D. M. A. et al. (Oxford, UK) - p. 347

The Journal of Biochemistry

94 No. 6 1983

Amino Acid Sequence of Troponin C Obtained from Ascidian (*Halocynthia roretzi*) Body Wall Muscle. Takagi, T. and Konishi, K. (Sendai, Japan) - p. 1753

Fibrinopeptides A and B of Baboons (*Papio anubis*, *Papio hamadryas*, and *Theropithecus gelada*): Their Amino Acid Sequence and Evolutionary Rates and a Molecular Phylogeny for the Baboons. Nakamura, S. et al. (Aichi, Japan) - p. 1973

Further Fractionation of Basic Proline-Rich Peptides from Human Parotid Saliva and Complete Amino Acid Sequence of Basic Proline-Rich Peptide P-H. Saitoh, E. et al. (Niigata, Japan) - p. 1991

The Journal of Biological Chemistry

258 No. 23 1983

Proline-Rich Polypeptides Bound to Rat Prostatic Binding Protein. The Primary Structure of the Two Main Components, Proline-Rich Polypeptides IV and V. Peeters, B. et al. (Leuven, Belgium) - p. 14206

Purification, Structure, and Properties of Hxybrid 8-Galactosidase Proteins. Fowler, A. V. and Zabin, I. (Los Angeles, USA) - p. 14354

Primary Structures of MCP-1 and MCP-2, Natural Peptide Antibiotics of Rabbit Lung Macrophages. Selsted, M. E. et al. (Los Angeles, USA) - p. 14485

Isolation and Partial Characterization of the NH_2 -Terminal Membrane-Binding Domain of NADH-Cytochrome b_5 Reductase. Kensil, C. R. et al. (Farmington, USA) - p. 14656

258 No. 24 1983

Structure of Human Erythrocyte Spectrin. I. Isolation of the α -I Domain and Its Cyanogen Bromide Peptides. Speicher, D. W. et al. (New Haven, USA) - p. 14931

Structure of Human Erythrocyte Spectrin. II. The Sequence of the α -I Domain. Speicher, D. W. et al. (New Haven, USA) - p. 14938

The NH_2 -Terminal Amino Acid Sequence of Bovine Skin Proctodermatan Sulfate. Pearson, C. H. et al. (Edmonton, Canada) - p. 15101

European Journal of Biochemistry

138 No. 1 1984

Isolation and Complete Amino-Acid Sequence of the Small Polypeptide from Light-Harvesting Pigment-Protein Complex I (B870) of *Rhodospseudomonas capsulata*. Tador, N. H. et al. (Freiburg, FRG) - p. 209

138 No. 2 1984

Complete Amino Acid Sequence of Mouse Prolactin. Kohmoto, K. et al. (Osaka, Japan) - p. 227

Region X, the Cell-Wall-Attachment Part of Staphylococcal Protein A. Guss, B. et al. (Uppsala, Sweden) - p. 413

The Italian Journal of Biochemistry

32 No. 5 1983

Primary Structure of Water Buffalo β -Casein Tryptic and CNBr Peptides. Petrilli, P. et al. (Naples, Italy) - p. 336

Molecular Immunology

20 No. 12 1983

Immunologically Active Nonapeptide Fragment of a Proline-Rich Polypeptide from Ovine Colostrum: Amino Acid Sequence and Immunoregulatory Properties. Staroscik, K. et al. (Wroclaw, Poland) - p. 1277

Proceedings of the National Academy of Sciences of the USA

80 No. 23 1983

Metorphamide: Isolation, Structure, and Biologic Activity of an Amidated Opioid Octapeptide from Bovine Brain. Weber, E. et al. (Stanford, USA) - p. 7362

Compiled by L. Träger