## CONTENTS

**Volume 258, No. 3, 1989**

### REVIEW ARTICLE

Acylation of viral and eukaryotic proteins  
R. J. A. Grand  625-638

### FULL AND RAPID PAPERS

#### Proteins

- **T-cell recognition and antigen presentation of myoglobin. Protein recognition by site-specific T-cell clones is influenced by amino acid substitutions outside the site**  
  M. Yoshioka & M. Z. Atassi  645-651

- **Effects of deletion of tropomyosin overlap on regulated actomyosin subfragment 1 ATPase**  
  D. H. Heeley, L. B. Smith & E. M. Lohmeier-Vogel  831-836

- **Developmental regulation of murine mammary-gland 90 kDa heat-shock proteins**  
  M. Yoshioka & M. Z. Atassi  895-901

- **Truncated forms of human complement Factor H**  
  M. Fontaine, M. J. Demares, V. Koistinen & A. J. Day  927-930

#### Enzymes

- **Probing the substrate-binding sites of aminoacyl-tRNA synthetases with the Procion dye Green HE-4BD**  
  J. E. C. McArderell, M. Duffield & T. Atkinson  715-721

- **The influence of fatty acid unsaturation and physical properties of microsomal membrane phospholipids on UDP-glucuronyltransferase activity**  
  C. E. Castuma & R. R. Brenner  723-731

- **Vanadium K-edge X-ray-absorption spectroscopy of the functioning and thionine-oxidized forms of the VFe-protein of the vanadium nitrogenase from Azotobacter chroococcum**  

- **Purification and characterization of myosin light-chain kinase from the rat pancreas**  
  M. Bissonnette, D. Kuhn & P. de Lanerolle  739-747

- **Identification of signalling and non-signalling binding contributions to enzyme reactivity. Alternative combinations of binding interactions provide for change in transition-state geometry in reactions of papain**  

- **A thiono-β-lactam substrate for the β-lactamase II of Bacillus cereus. Evidence for direct interaction between the essential metal ion and substrate**  
  B. P. Murphy & R. F. Pratt  765-768

- **Kinetic characteristics of a thioredoxin-activated rat hepatic and renal low-K₉₁ isodityrosine 5-deiodinase**  
  G. B. Bhat, K. Iwase, B. C. W. Hummel & P. G. Walish  785-792

- **A ¹⁴C-n.m.r. investigation of the ionizations within an inhibitor-α-chymotrypsin complex. Evidence that both α-chymotrypsin and trypsin stabilize a hemiketal oxyanion by similar mechanisms**  
  M. D. Finucane, E. A. Hudson & J. P. G. Malthouse  853-859

#### Gene structure and expression

- **Characterization of difluoromethylornithine-resistant mouse and human tumour cell lines**  
  A. Hirvon, E. T. Eloranta, T. Hyvönen, L. Alhonen & J. Jänne  709-713

- **Activation of the human e- and β-globin promoters by SV40 T antigen**  
  S. X. Cao, H. Mishoe, J. Elion, P. E. Berg & A. N. Schechter  769-776

- **Unconventional codon reading by Mycoplasma mycoides tRNAs as revealed by partial sequence analysis**  

#### Synthesis and degradation of macromolecules

- **Regulation of plasma acute-phase protein and albumin levels in the liver of scalded rats**  

- **Regulation of carnitine palmitoyltransferase in vivo by glucagon and insulin**  
  P. S. Brady & L. J. Brady  677-682

- **A mucus-secreting human colon cancer cell line. Purification and partial characterization of the secreted mucins**  
  J.-J. Maoret, J. Font, C. Augeron, P. Codogno, C. Bauvy, M. Aubery & C. L. Laboisse  793-799
CONTENTS (continued)

Acquisition of hyaluronate binding affinity \textit{in vivo} by newly synthesized cartilage proteoglycans  
J. D. Sandy, J. R. O'Neill & L. C. Ratzlaff  
875–880

Effect of growth factors on hyaluronan synthesis in cultured human fibroblasts  
P. Heldin, T. C. Laurent & C.-H. Heldin  
919–922

**Intermediary metabolism and metabolic control**

Evidence for the involvement of a gastrointestinal peptide in the regulation of glucose uptake in the mammary gland of the lactating rat  
T. Page  
639–643

Effect of nutritional status on insulin sensitivity \textit{in vivo} and tissue enzyme activities in the rat  
Y. T. Kruszynska & J. G. McCormack  
699–707

Stimulation by ATP–Mg\textsuperscript{2+} and inactivation by cyclic-AMP-dependent phosphorylation of a cytosolic monkey brain aminopeptidase  
S. Ramamoorthy & A. S. Balasubramanian  
777–783

Inhibition of myeloperoxidase by salicylhydroxamic acid  
B. Davies & S. W. Edwards  
801–806

Cholesterol is required for secretion of very-low-density lipoprotein by rat liver  
B. Khan, H. G. Wilcox & M. Heimberg  
807–816

Inhibition of mitochondrial-matrix inorganic pyrophosphatase by physiological [Ca\textsuperscript{2+}], and its role in the hormonal regulation of mitochondrial matrix volume  
A. M. Davidson & A. P. Halestrap  
817–821

Oxidation of 5-methyltetrahydrofolate in cobalamin-inactivated rats  
M. Lumb, R. Deacon, J. Perry & I. Chanarin  
907–910

Glucose formation in human skeletal muscle. Influence of glycogen content  
K. Sahlin, S. Broberg & A. Katz  
911–913

Transient increase in glucose 1,6-bisphosphate in human skeletal muscle during isometric contraction  
A. D. Lee & A. Katz  
915–918

**Membranes and receptors**

28 kDa adenosine-binding proteins of brain and other tissues  
653–661

Xanthene-dye-labelled phosphatidylethanolamines as probes of interfacial pH. Studies in phospholipid vesicles  
C. G. Knight & T. Stephens  
683–689

The diacylglycerol analogue, 1,2-sn-dioctanoylglycerol, induces an increase in cytosolic free Ca\textsuperscript{2+} and cytosolic acidification of T lymphocytes through a protein kinase C-independent process  
R. Ebanks, C. Roifman, A. Mellors & G. B. Mills  
689–698

The effect of limited proteolysis on GTP-dependent Ca\textsuperscript{2+} efflux and GTP-dependent fusion in rat liver microsomal vesicles  
J. G. Comerford & A. P. Dawson  
823–829

Cell fractionation studies indicate that dystrophin is a protein of surface membranes of skeletal muscle  
G. Salvato, R. Betto, S. Ceoldo, E. Biasia, E. Bonilla, A. F. Miranda & S. Dimauro  
837–841

Identification of a novel inflammatory stimulant of chondrocytes. Early events in cell activation by bradykinin receptors on pig articular chondrocytes  
H. P. Benton, T. R. Jackson & M. R. Hanley  
861–867

Novel ligands for the affinity labelling of luteinizing hormone releasing hormone receptors  
S.-A. Ogier, R. Mitchell & C. M. Bladon  
881–888

Calcium rather than cyclic AMP is an intracellular messenger of parathyroid hormone action on glycogen metabolism in isolated rat hepatocytes  
T. Mine, I. Kojima & E. Ogata  
889–894

Abnormalities in the erythrocyte membrane in acute lymphoid leukaemia  
M. Kundu, J. Basu, P. Chakrabarti & M. M. Rakshit  
903–906

Receptor-mediated calcium entry in fura-2-loaded human platelets stimulated with ADP and thrombin. Dual-wavelength studies with Mn\textsuperscript{2+}  
S. O. Sage, J. E. Merritt, T. J. Hallam & T. J. Rink  
923–926

**Cell structure and function**

Effects of \textit{Bordetella pertussis} toxin on catecholamine inhibition of insulin release from intact and electrically permeabilized rat islets  
S. J. Persaud, P. M. Jones & S. L. Howell  
669–675

Effect of acidotropic amines on the accumulation of newly synthesized membrane and luminal proteins in Chinese-hamster ovary (CHO) cell lysosomes  
E. A. Madden & B. Storrie  
843–851
CONTENTS (continued)

Methods
Detection of bacterial lipoic acid. A modified gas-chromato-
graphic–mass-spectrometric procedure

BJ LETTERS
Aluminofluoride action on G-proteins of the adenylate cyclase system
is not different from that on transducin
Fluoride interaction with G-proteins

K. J. Pratt, C. Carles, T. J. Carne, M. J. Danson & K. J. Stevenson

M. Chabre

J. M. Stadel & S. T. Crooke

749–754

931–932

932–933