

Review**Carnitine biosynthesis in mammals**
by F.M. Vaz and R.J.A. Wanders

417–429

Research Communication

A novel immunoglobulin superfamily receptor (19A) related to CD2 is expressed on activated lymphocytes and promotes homotypic B-cell adhesion

J.J. Murphy, P. Hobby, J. Vilarino-Varela, B. Bishop, P. Iordanidou, B.J. Sutton and J.D. Norton

431–436

Research Papers

Crystal structure of human carbonic anhydrase II complexed with an anti-convulsant sugar sulphamate

R. Recacha, M.J. Costanzo, B.E. Maryanoff and D. Chattopadhyay

437–441

Interaction of the synaptic protein PICK1 (protein interacting with C kinase 1) with the non-voltage gated sodium channels BNC1 (brain Na⁺ channel 1) and ASIC (acid-sensing ion channel)

A.M. Hruska-Hageman, J.A. Wemmie, M.P. Price and M.J. Welsh

443–450

Tankyrase-2 oligomerizes with tankyrase-1 and binds to both TRF1 (telomere-repeat-binding factor 1) and IRAP (insulin-responsive aminopeptidase)

J.I. Sbodio, H.F. Lodish and N.-W. Chi

451–459

Oxysterol-binding-protein (OSBP)-related protein 4 binds 25-hydroxycholesterol and interacts with vimentin intermediate filaments

C. Wang, L. JeBailey and N.D. Ridgway

461–472

Retention at the *cis*-Golgi and delayed degradation of tissue-non-specific alkaline phosphatase with an Asn¹⁵³ → Asp substitution, a cause of perinatal hypophosphatasia

M. Ito, N. Amizuka, H. Ozawa and K. Oda

473–480

A single WW domain is the predominant mediator of the interaction between the human ubiquitin-protein ligase Nedd4 and the human epithelial sodium channel

J.S. Lott, S.J. Coddington-Lawson, P.H. Teesdale-Spittle and F.J. McDonald

481–488

A distinct bipartite motif is required for the localization of inhibitory κ B-like (κ BL) protein to nuclear speckles

J.I. Semple, S.E. Brown, C.M. Sanderson and R.D. Campbell

489–496

Role of glutathione in the multidrug resistance protein 4 (MRP4/ABCC4)-mediated efflux of cAMP and resistance to purine analogues

L. Lai and T.M.C. Tan

497–503

Nuclear-localization-signal-dependent and nuclear-export-signal-dependent mechanisms determine the localization of 5-lipoxygenase

H. Hanaka, T. Shimizu and T. Izumi

505–514

Chimaeric gonadotropin-releasing hormone (GnRH) peptides with improved affinity for the catfish (*Clarias gariepinus*) GnRH receptor

M. Blomenröhr, T. ter Laak, R. Kühne, M. Beyermann, E. Hund, J. Bogerd and R. Leurs

515–523

Evidence that the tandem-pleckstrin-homology-domain-containing protein TAPP1 interacts with Ptd(3,4)P₂ and the multi-PDZ-domain-containing protein MUPP1 *in vivo*

W.A. Kimber, L. Trinkle-Mulcahy, P.C.F. Cheung, M. Deak, L.J. Marsden, A. Kieloch, S. Watt, R.T. Javier, A. Gray, C.P. Downes, J.M. Lucocq and D.R. Alessi

525–536



Heterogeneity of airways mucus: variations in the amounts and glycoforms of the major oligomeric mucins MUC5AC and MUC5B

S. Kirkham, J.K. Sheehan, D. Knight, P.S. Richardson and D.J. Thornton

537–546

A pH-dependent conformational transition of A β peptide and physicochemical properties of the conformers in the glial cell	Y. Matsunaga, N. Saito, A. Fujii, J. Yokotani, T. Takakura, T. Nishimura, H. Esaki and T. Yamada	547–556
Inhibition of the integrases of human immunodeficiency viruses type 1 and type 2 by reverse transcriptases	I. Oz, O. Avidan and A. Hizi	557–566
Purification and molecular cloning of rat 2-amino-3-carboxymuconate-6-semialdehyde decarboxylase	A. Tanabe, Y. Egashira, S.-I. Fukuoka, K. Shibata and H. Sanada	567–575
Modulation of the reactivity of the essential cysteine residue of betaine aldehyde dehydrogenase from <i>Pseudomonas aeruginosa</i>	L. González-Segura, R. Velasco-García and R.A. Muñoz-Clares	577–585
The human homologue of the yeast polyubiquitination factor Ufd2p is cleaved by caspase 6 and granzyme B during apoptosis	J.A. Mahoney, J.A. Odin, S.M. White, D. Shaffer, A. Koff, L. Casciola-Rosen and A. Rosen	587–595
Phosphorylation of a novel zinc-finger-like protein, ZPR9, by murine protein serine/threonine kinase 38 (MPK38)	H.-A. Seong, M. Gil, K.-T. Kim, S.-J. Kim and H. Ha	597–604
A novel Ca ²⁺ -induced Ca ²⁺ release mechanism mediated by neither inositol trisphosphate nor ryanodine receptors	F. Wissing, E.P. Nerou and C.W. Taylor	605–611
S ₂ ' substrate specificity and the role of His ¹¹⁰ and His ¹¹¹ in the exopeptidase activity of human cathepsin B	J.C. Krupa, S. Hasnain, D.K. Nägler, R. Ménard and J.S. Mort	613–619
Retinoic acid activation of the ERK pathway is required for embryonic stem cell commitment into the adipocyte lineage	F. Bost, L. Caron, I. Marchetti, C. Dani, Y. Le Marchand-Brustel and B. Binétruy	621–627
Induction of Bach1 and ARA70 gene expression at an early stage of adipocyte differentiation of mouse 3T3-L1 cells	M. Nishizuka, T. Tsuchiya, T. Nishihara and M. Imagawa	629–633
Overexpression, purification and biochemical characterization of a class A high-molecular-mass penicillin-binding protein (PBP), PBP1* and its soluble derivative from <i>Mycobacterium tuberculosis</i>	S. Bhakta and J. Basu	635–639
Human Hand1 basic helix-loop-helix (bHLH) protein: extra-embryonic expression pattern, interaction partners and identification of its transcriptional repressor domains	M. Knöfler, G. Meinhardt, S. Bauer, T. Loregger, R. Vasicek, D.J. Bloor, S.J. Kimber and P. Husslein	641–651
Cell-permeable ceramides preferentially inhibit coated vesicle formation and exocytosis in Chinese hamster ovary compared with Madin–Darby canine kidney cells by preventing the membrane association of ADP-ribosylation factor	A. Abousalham, T.C. Hobman, J. Dewald, M. Garbutt and D.N. Brindley	653–661
Structural requirements for palmitoylation of surfactant protein C precursor	A. ten Brinke, A.B. Vaandrager, H.P. Haagsman, A.N.J.A. Ridder, L.M.G. van Golde and J.J. Batenburg	663–671
Expression of liver plasma membrane transporters in gallstone-susceptible and gallstone-resistant mice	O. Müller, C. Schalla, J. Scheibner, E.F. Stange and M. Fuchs	673–679
Oxidative stress inhibits caveolin-1 palmitoylation and trafficking in endothelial cells	M.-O. Parat, R.Z. Stachowicz and P.L. Fox	681–688
<i>myo</i> -Inositol 1,4,5-trisphosphate and Ca ²⁺ /calmodulin-dependent factors mediate transduction of compression-induced signals in bovine articular chondrocytes	W.B. Valhmu and F.J. Raia	689–696