



ELSEVIER

Journal of Steroid Biochemistry & Molecular Biology 88 (2004) III–V

The Journal of  
Steroid Biochemistry  
&  
Molecular Biology

[www.elsevier.com/locate/jsbmb](http://www.elsevier.com/locate/jsbmb)

## List of Contents

### JANUARY 2004

#### Vol. 88, No. 1

##### General review

**Ernesto G. Occhiato, Antonio Guarino,  
Giovanna Danza and Mario Serio**

**Ramesh A. Bhat, Barbara Stauffer,  
Raymond J. Unwalla, Zhangbao Xu,  
Heather A. Harris and Barry S. Komm**

**Derek Morrow, Chunhua Qin,  
Roger Smith III and Stephen Safe**

**S.R. Aspinall, S. Stamp, A. Davison,  
B.K. Shenton and T.W.J. Lennard**

**Nariaki Fujimoto, Hiroaki Honda and  
Shigeyuki Kitamura**

**Luchuan Cao, Susan Leers-Sucheta and  
Salman Azhar**

**Jennifer H. Gutzman, Kristin K. Miller and  
Linda A. Schuler**

**Luisa Dalla Valle, Vania Toffolo, Silvia Vianello,  
Paola Belvedere and Lorenzo Colombo**

**José Luis Pruneda-Paz, Mauricio Linares,  
Julio E. Cabrera and Susana Genti-Raimondi**

**Dalia Somjen, Channing J. Paller, Batya Gayer,  
Fortune Kohen, Esther Knoll and Naftali Stern**

##### Book review

**Jorge R. Pasqualini**

- 1 Selective non-steroidal inhibitors of 5 $\alpha$ -reductase type 1
- 17 Molecular determinants of ER $\alpha$  and ER $\beta$  involved in selectivity of 16 $\alpha$ -ido-17 $\beta$  estradiol
- 27 Aryl hydrocarbon receptor-mediated inhibition of LNCaP prostate cancer cell growth and hormone-induced transactivation
- 37 The proliferative effects of 5-androstene-3 $\beta$ ,17 $\beta$ -diol and 5 $\alpha$ -dihydrotestosterone on cell cycle analysis and cell proliferation in MCF7, T47D and MDAMB231 breast cancer cell lines
- 53 Effects of environmental estrogenic chemicals on AP1 mediated transcription with estrogen receptors  $\alpha$  and  $\beta$
- 61 Aging alters the functional expression of enzymatic and non-enzymatic anti-oxidant defense systems in testicular rat Leydig cells
- 69 Endogenous human prolactin and not exogenous human prolactin induces estrogen receptor  $\alpha$  and prolactin receptor expression and increases estrogen responsiveness in breast cancer cells
- 79 Expression of cytochrome P450ccc mRNA and protein in the rat kidney from birth to adulthood
- 91 Identification of a novel steroid inducible gene associated with the  $\beta$ hsd locus of *Comamonas testosteroni*
- 101 High glucose blocks the effects of estradiol on human vascular cell growth: differential interaction with estradiol and raloxifene
- 111 Breast Cancer: Prognosis, Treatment and Prevention

### FEBRUARY 2004

#### Vol. 88, No. 2

**Larry N. Petz, Yvonne S. Ziegler,  
Jennifer R. Schultz, Hwajin Kim,  
J. Kim Kemper and Ann M. Nardulli**

**Koji Yamakawa and Jun Arita**

- 113 Differential regulation of the human progesterone receptor gene through an estrogen response element half site and Sp1 sites
- 123 Cross-talk between the estrogen receptor-, protein kinase A-, and mitogen-activated protein kinase-mediated signaling pathways in the regulation of lactotroph proliferation in primary culture

<b>T. Flötotto, D. Niederacher, D. Hohmann, T. Heimerzheim, P. Dall, S. Djahansouzi, H.G. Bender and B. Hanstein</b>	131 Molecular mechanism of estrogen receptor (ER) $\alpha$ -specific, estradiol-dependent expression of the progesterone receptor (PR) B-isoform
<b>Huili Zheng, Lauri Kangas and Pirkko L. Häkkinen</b>	143 Comparative study of the short-term effects of a novel selective estrogen receptor modulator, ospemifene, and raloxifene and tamoxifen on rat uterus
<b>Partha Roy, Heli Salminen, Pasi Koskimies, Janne Simola, Annika Smeds, Pekka Saukko and Ilpo T. Huhtaniemi</b>	157 Screening of some anti-androgenic endocrine disruptors using a recombinant cell-based in vitro bioassay
<b>Tomoyuki Saito, Setsuo Kinoshita, Tomohito Fujii, Koji Bandoh, Saeko Fuse, Yukinao Yamauchi, Naoyuki Koizumi and Toshi Horiuchi</b>	167 Development of novel steroid sulfatase inhibitors. II. TZS-8478 potently inhibits the growth of breast tumors in postmenopausal breast cancer model rats
<b>Shuji Ohno, Noriko Matsumoto, Masatada Watanabe and Shizuo Nakajin</b>	175 Flavonoid inhibition of overexpressed human 3 $\beta$ -hydroxysteroid dehydrogenase type II
<b>Yui Kitaoka, Jo Kitawaki, Hisato Koshiba, Shigeo Inoue, Hiroaki Ishihara, Mariko Teramoto and Hideo Honjo</b>	183 Aromatase cytochrome P450 and estrogen and progesterone receptors in uterine sarcomas: correlation with clinical parameters
<b>Ester Carballo-Jane, Shilpa Pandit, Joseph C. Santoro, Concetta Freund, Silvi Luell, Georgianna Harris, Michael J. Forrest and Ayesha Sitlani</b>	191 Skeletal muscle: a dual system to measure glucocorticoid-dependent transactivation and transrepression of gene regulation
<b>Catherine Le Jossic-Corcos, Gabriela M. Pastori, Sandrine Duclos, Yoshiki Kawabe, Thierry Pineau and Paulette Bournot</b>	203 Peroxisome proliferator-activated receptor $\alpha$ (PPAR $\alpha$ ) activators induce hepatic farnesyl diphosphate synthase gene expression in rodents
<b>Sara Katzburg, David Hendel, Anna. Waisman, Gary H. Posner, Alvin M. Kaye and Dalia Somjen</b>	213 Treatment with non-hypercalcemic analogs of 1,25-dihydroxyvitamin D <sub>3</sub> increases responsiveness to 17 $\beta$ -estradiol, dihydrotestosterone or raloxifene in primary human osteoblasts
<i>Book review</i> <b>Jorge R. Pasqualini</b>	221 Breast Cancer: Prognosis, Treatment and Prevention
<b>MARCH 2004</b>	
<b>Vol. 88, No. 3</b>	
<b>Barry D. Gehm, Anait S. Levenson, Hong Liu, Eun-Jig Lee, Beth M. Amundsen, Mark Cushman, V. Craig Jordan and J. Larry Jameson</b>	223 Estrogenic effects of resveratrol in breast cancer cells expressing mutant and wild-type estrogen receptors: role of AF-1 and AF-2
<b>Puloma Lala, Tadayoshi Higashiyama, Mary Erman, Jennifer Griswold, Traci Wagner, Yoshio Osawa and Debashis Ghosh</b>	235 Suppression of human cytochrome P450 aromatase activity by monoclonal and recombinant antibody fragments and identification of a stable antigenic complex
<b>Abdelhabib Semlali, Joan Oliva, Eric Badia, Michel Pons and Marie-Josèphe Duchesne</b>	247 Immediate early gene X-1 ( <i>IEX-1</i> ), a hydroxytamoxifen regulated gene with increased stimulation in MCF-7 derived resistant breast cancer cells
<b>Hirokazu Takahashi, Atsushi Nakajima and Hisahiko Sekihara</b>	261 Dehydroepiandrosterone (DHEA) and its sulfate (DHEAS) inhibit the apoptosis in human peripheral blood lymphocytes
<b>Zhi-Jian Liu and Bao Ting Zhu</b>	265 Concentration-dependent mitogenic and antiproliferative actions of 2-methoxyestradiol in estrogen receptor-positive human breast cancer cells
<b>Barbara J. Attardi, Janet Burgenson, Sheri A. Hild and Jerry R. Reel</b>	277 In vitro antiprogestational/antiglucocorticoid activity and progestin and glucocorticoid receptor binding of the putative metabolites and synthetic derivatives of CDB-2914, CDB-4124, and mifepristone
<b>Ulrika Segersten, Pernille Kaae Holm, Lise Binderup, Göran Åkerström, Per Hellman and Gunnar Westin</b>	289 Vitamin D <sub>3</sub> polyunsaturated side-chain analogues (EB1089, GS1590) and the 20-epi-vitamin D <sub>3</sub> analogue CB1393 suppress parathyroid hormone secretion and mRNA level in bovine parathyroid cells

**H. Welter, K. Wollenhaupt and R. Einspanier**

295 Developmental and hormonal regulated gene expression of fibroblast growth factor 2 (FGF-2) and its receptors in porcine endometrium

**WonChung Lim, Dukkyung Kim,  
Jeong Bae Park, Suhn Hee Kim and  
YoungJoo Lee**

305 Sodium chloride regulation of the  $\alpha$  epithelial amiloride-sensitive sodium channel ( $\alpha$ ENaC) gene requires syntheses of new protein(s)

**Claudia C. Gregorio-King, Tamara Gough,  
Gavin J. Van Der Meer, Jane B. Hosking,  
Caryll M. Waugh, Janet L. McLeod,  
Fiona Mc. Collier and Mark A. Kirkland**

311 Mechanisms of resistance to the cytotoxic effects of oxysterols in human leukemic cells

*Book review***Jorge R. Pasqualini**

321 Breast Cancer: Prognosis, Treatment and Prevention

**APRIL 2004****Vol. 88, Nos. 4–5***Review***Katrin Sak and Hele Everaus**

323 Nongenomic effects of  $17\beta$ -estradiol—diversity of membrane binding sites

*Review***Dana Cohen and Jonathan D. Adachi**

337 The treatment of glucocorticoid-induced osteoporosis

**Dalei Shao, Thomas J. Berrodin, Eric Manas,  
Diane Hauze, Robert Powers, Ashok Bapat,  
Daniel Gonder, Richard C. Winneker  
and Donald E. Frail**

351 Identification of novel estrogen receptor  $\alpha$  antagonists

**Rita Humeniuk-Polaczek and Ewa Marcinkowska**

361 Impaired nuclear localization of vitamin D receptor in leukemia cells resistant to calcitriol-induced differentiation

**A. Thompson, V.K.M. Han and K. Yang**

367 Differential expression of  $11\beta$ -hydroxysteroid dehydrogenase types 1 and 2 mRNA and glucocorticoid receptor protein during mouse embryonic development

**János Garai and Herman Adlercreutz**

377 Estrogen-inducible uterine flavonoid binding sites: is it time to reconsider?

**Josie L. Falany, Nancy Macrina  
and Charles N. Falany**

383 Sulfation of tibolone and tibolone metabolites by expressed human cytosolic sulfotransferases

**Takuya Sugiyama, Shuji Ohno, Debasish Ghosh  
and Shizuo Nakajin**

393  $3\alpha/\beta,20\beta$ -Hydroxysteroid dehydrogenase (porcine testicular carbonyl reductase) also has a cysteine residue that is involved in binding of cofactor NADPH

**Cara L. Frankenfeld, Anne McTiernan,  
Shelley S. Tworoger, Charlotte Atkinson,  
Wendy K. Thomas, Frank Z. Stanczyk,  
Santica M. Marcovina, David S. Weigle,  
Noel S. Weiss, Victoria L. Holt,  
Stephen M. Schwartz and Johanna W. Lampe**

399 Serum steroid hormones, sex hormone-binding globulin concentrations, and urinary hydroxylated estrogen metabolites in post-menopausal women in relation to daidzein-metabolizing phenotypes

**Georg Walter, Renate Liebl  
and Erwin von Angerer**

409 2-Phenylindole sulfamates: inhibitors of steroid sulfatase with antiproliferative activity in MCF-7 breast cancer cells

**III List of Contents to Vol. 88****VII Subject index to Vol. 88****XI Author index to Vol. 88**