

JOURNAL OF ENDOCRINOLOGY

PHYSIOLOGY, METABOLISM
AND TRANSLATION

JULY 2017
VOLUME 234
NUMBER 1

ISSN 0022-0795 (PRINT)
ISSN 1479-6805 (ONLINE)

CONTENTS

<http://joe.endocrinology-journals.org>



EDITORIALS

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Short reflections on the discovery of the mineralocorticoid receptor

Ronald M Evans

E1-E2

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: The scientific impact of cloning the mineralocorticoid receptor: 30 years on

John W Funder & Maria-Christina Zennaro

E3-E6

THEMATIC REVIEWS

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Evolution of the mineralocorticoid receptor: sequence, structure and function

Michael E Baker & Yoshinao Katsu

T1-T16

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Mineralocorticoid receptor activation and specificity-conferring mechanisms: a brief history

John W Funder

T17-T21

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Coregulators as mediators of mineralocorticoid receptor signalling diversity

Peter J Fuller, Jun Yang & Morag J Young

T23-T34

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Mineralocorticoid receptor and NaCl transport mechanisms in the renal distal nephron

Shigeru Shibata

T35-T47

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: The brain mineralocorticoid receptor: a saga in three episodes

Marian Joëls & E Ronald de Kloet

T49-T66

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: The role of the mineralocorticoid receptor in the vasculature

Jennifer J DuPont & Iris Z Jaffee

T67-T82

The images depict: (left) Ronald M Evans pictured in 1985 with a sequencing gel from the GR and MR projects; (right) the superposition of helix 12 and the preceding loop in human MR and human GR, from Baker & Katsu 234 T1-T16.

Credits: (left) Salk Institute for Biological Studies, La Jolla, CA, USA; (right) M E Baker (University of California) & Y Katsu (Hokkaido University)

CONTENTS

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Mineralocorticoid receptor null mice: informing cell-type-specific roles
Timothy J Cole & Morag J Young

T83-T92

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Mineralocorticoid receptor mutations
Maria-Christina Zennaro & Fabio Fernandes-Rosa

T93-T106

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Nongenomic effects via the mineralocorticoid receptor
Stefanie Ruhs, Alexander Nolze, Ralf Hübschmann & Claudia Grossmann

T107-T124

30 YEARS OF THE MINERALOCORTICOID RECEPTOR: Mineralocorticoid receptor antagonists: 60 years of research and development
Peter Kolkhof & Lars Bärfacker

T125-T140

REVIEWS

Hepatic lipid accumulation: cause and consequence of dysregulated glucoregulatory hormones
Caroline E Geisler & Benjamin J Renquist

R1-R21

The interfaces between vitamin D, sleep and pain
Daniela Leite de Oliveira, Camila Hirotsu, Sergio Tufik & Monica Levy Andersen

R23-R36

Aging human body: changes in bone, muscle and body fat with consequent changes in nutrient intake
Pegah JafariNasabian, Julia E Inglis, Wendimere Reilly, Owen J Kelly & Jasminka Z Illich

R37-R51

Endocrine targets of hypoxia-inducible factors
Hsiu-Chi Lee & Shaw-Jeng Tsai

R53-R65

Skeletal energy homeostasis: a paradigm of endocrine discovery
Karla J Suchacki, Fiona Roberts, Andrea Lovdel, Colin Farquharson, Nik M Morton, Vicky E MacRae & William P Cawthorn

R67-R79

RESEARCH

MiRNA-143 mediates the proliferative signaling pathway of FSH and regulates estradiol production
Li Zhang, XiaoXin Zhang, Xuejing Zhang, Yu Lu, Lei Li & Sheng Cui

1-14

Protein kinase STK25 aggravates the severity of non-alcoholic fatty pancreas disease in mice
Esther Nuñez-Durán, Belén Chanclón, Silva Sütt, Joana Real, Hanns-Ulrich Marschall, Ingrid Wernstedt Asterolholm, Emmelie Cansby & Margit Mahlapuu

15-27

CONTENTS

Effect of mitotane on mouse ovarian follicle development and fertility

*Federica Innocenti, Lidia Cerquetti, Serena Pezzilli, Barbara Bucci,
Vincenzo Toscano, Rita Canipari & Antonio Stigliano*

29–39

**Hypothalamic effects of neonatal diet: reversible and only partially
leptin dependent**

Luba Sominsky, Ilvana Ziko, Thai-Xinh Nguyen, Julie Quach & Sarah J Spencer

41–56

**The metabolic syndrome in mice overexpressing neuropeptide Y in
noradrenergic neurons**

*Liisa Ailanen, Suvi T Ruohonen, Laura H Vähätalo, Katja Tuomainen, Kim Eerola,
Henriikka Salomäki-Myftari, Matias Röyttä, Asta Laiho, Markku Ahotupa,
Helena Gylling & Eriika Savontaus*

57–72