武田研究業績集

２００５

Publications
of
Takeda Research Laboratories
2005

July 2006

武 田 薬 品 工 業 株 式 会 社
Takeda Pharmaceutical Company Limited
Osaka, Japan

CONTENTS

Originals in English

Originals in Japanese

Supplement

Originals in English

Analytical Chemistry

[T1] Characterization of Pharmaceutical Polymorphs by Isothermal Calorimetry

Koji Urakami

Current Pharmaceutical Biotechnology, **6**(3): 193-203, 2005

浦上康司

[T2] Application of thermally stimulated current measurement to the polymorphic characterization of drug substances

Yukihiro Ikeda, Taisei Hirayama [a] and Katsuhide Terada [b]

Thermochimica Acta, **431**: 195-199, 2005

池田幸弘, 平山泰夫 [a], 寺田勝英 [b]

[a] Rigaku Corporation, Tokyo

[b] School of Pharmaceutical Sciences, Toho University, Chiba

Organic Chemistry

[T3] Synthetic studies on (–)-lemonomycin: stereocontrolled construction of the 3,8-diazabicyclo[3.2.1] skeleton

Kentaro Rikimaru [a,b], Kazuki Mori [a], Toshiyuki Kan [a] and Tohru Fukuyama [a]

Chemical Communications, **2005**(3): 394 - 396

力丸健太郎 [a,b], 森　一樹 [a], 菅　敏幸 [a], 福山　透 [a]

[a] Graduate School of Pharmaceutical Sciences, University of Tokyo, Tokyo

[b] Present address: Takeda Pharmaceutical Co. Ltd., Osaka

[T4] Catalytic, Enantioselective, Conjugate Alkyne Addition

Thomas F. Knöpfel [a], Pablo Zarotti [a], Takashi Ichikawa and Erick M. Carreira [a]

Journal of the American Chemical Society, **127**(27): 9682 -9683, 2005

一川隆史

[a] Laboratorium für Organische Chemie, ETH Hönggerberg, Switzerland

[T5] A New Practical One-Pot Conversion of Phenols to Anilines

Masahiro Mizuno and Mitsuhisa Yamano

Organic Letters, **7**(17): 3629-3631, 2005

水野正博, 山野光久

[T6] Practical Synthesis of an Orally Active CCR5 Antagonist, 7-{4-[2-(Butoxy)-ethoxy]phenyl}-*N*-(4-{[methyl(tetrahydro-2*H*-pyran-4-yl)amino]methyl}phenyl)-1-propyl-2,3-dihydro-1*H*-1-benzazepine-4-carboxamide

Tomomi Ikemoto, Tatsuya Ito, Atsuko Nishiguchi, Syotaro Miura and Kiminori Tomimatsu

Organic Process Research and Development, **9**(2): 168-173, 2005

池本朋己, 伊藤達也, 西口敦子, 三浦正太郎, 冨松公典

[T7] Synthetic studies on 3-arylquinazolin-4-ones: intramolecular nucleophilic aromatic substitution reaction of 2-carboxamido-3-arylquinazolin-4-ones and its application to the synthesis of secondary aryl amines

Haruhiko Fuwa [a], Toshitake Kobayashi, Takashi Tokitoh [a], Yukiko Torii [a] and Hideaki Natsugari [a]

Tetrahedron, **61**(17): 4297-4312, 2005

不破春彦 [a], 小林俊威, 時任貴志 [a], 鳥井由紀子 [a], 夏苅英昭 [a]

[a] Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo

[T8] Unusual asymmetric oxidation of sulfide; the diastereoselective oxidation of prochiral sulfide-chiral acid salt with hydrogen peroxide without metal

Tomomi Ikemoto, Atsuko Nishiguchi, Tatsuya Ito and Hiroyuki Tawada [a]

Tetrahedron, **61**(21): 5043-5048, 2005

池本朋己，西口敦子，伊藤達也，多和田紘之 [a]

[a] Present address: Central Pharmaceutical Research Institute, Japan Tobacco Inc., Takatsuki, Osaka

Medicinal Chemistry

[T9] Orally active CCR5 antagonists as anti-HIV-1 agents. Part 3: Synthesis and biological activities of 1-benzazepine derivatives containing a sulfoxide moiety

Masaki Seto, Naoki Miyamoto, Katsuji Aikawa, Yoshio Aramaki, Naoyuki Kanzaki, Yuji Iizawa, Masanori Baba [a] and Mitsuru Shiraishi

Bioorganic and Medicinal Chemistry, **13**(2): 363-386, 2005

瀬戸雅樹, 宮本直樹, 合川勝二, 荒牧慶夫, 神崎直之, 飯沢祐史, 馬場昌範 [a], 白石　充

[a] Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

[T10] CCR5 antagonists as anti-HIV-1 agents. Part 3: Synthesis and biological evaluation of piperidine-4-carboxamide derivatives

Shinichi Imamura, Youichi Nishikawa, Takashi Ichikawa, Taeko Hattori, Yoshihiro Matsushita, Shohei Hashiguchi, Naoyuki Kanzaki, Yuji Iizawa, Masanori Baba [a] and Yoshihiro Sugihara

Bioorganic and Medicinal Chemistry, **13**(2): 397-416, 2005

今村真一, 西川洋一, 一川隆史, 服部多恵子, 松下義弘, 橋口昌平, 神崎直之, 飯沢祐史, 馬場昌範 [a], 杉原芳博

[a] Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

[T11] Novel acetylcholinesterase inhibitor as increasing agent on rhythmic bladder contractions: SAR of 8-{3-[1-(3-fluorobenzyl)piperidin-4-yl]propanoyl}-1,2,5,6-tetrahydro-4*H*-pyrrolo[3,2,1-*ij*]quinolin-4-one (TAK-802) and related compounds

Yuji Ishichi, Mitsuru Sasaki, Masaki Setoh, Tetsuya Tsukamoto, Seiji Miwatashi, Hiroshi Nagabukuro, Satoshi Okanishi, Shigemitsu Imai, Reiko Saikawa, Takayuki Doi and Yuji Ishihara

Bioorganic and Medicinal Chemistry, **13**(6): 1901-1911, 2005

石地雄二, 佐々木 満, 瀬藤正記, 塚本徹哉, 見渡誠司, 長袋 洋, 岡西 聡, 今井重光, 犀川礼子, 土居孝行, 石原雄二

[T12] Synthesis and Biological Activities of 4-Phenyl-5-pyridyl-1,3-thiazole Derivatives as p38 MAP Kinase Inhibitors

Seiji Miwatashi, Yasuyoshi Arikawa, Ken-ichi Naruo, Keiko Igaki, Yasumasa Watanabe, Hiroyuki Kimura, Tomohiro Kawamoto and Shigenori Ohkawa

Chemical & Pharmaceutical Bulletin, **53**(4): 410-418, 2005

見渡誠司, 有川泰由, 成尾憲一, 井垣啓子, 渡邊泰正, 木村宏之, 河本朋広, 大川滋紀

[T13] Novel Inhibitor of p38 MAP Kinase as an Anti-TNF-α Drug: Discovery of *N*-[4-[2-Ethyl-4-(3-methylphenyl)-1,3-thiazol-5-yl]-2-pyridyl]benzamide (TAK-715) as a Potent and Orally Active Anti-Rheumatoid Arthritis Agent

Seiji Miwatashi, Yasuyoshi Arikawa, Etsuo Kotani, Maki Miyamoto, Ken-ichi Naruo, Hiroyuki Kimura, Toshimasa Tanaka, Satoru Asahi and Shigenori Ohkawa

Journal of Medicinal Chemistry, **48**(19): 5966-5979, 2005

見渡誠司, 有川泰由, 小谷悦郎, 宮本真紀, 成尾憲一, 木村宏之, 田中稔祐, 朝日 知, 大川滋紀

[T14] Discovery of Novel and Potent Small-Molecule Inhibitors of NO and Cytokine Production as Antisepsis Agents: Synthesis and Biological Activity of Alkyl 6-(N-Substituted sulfamoyl)cyclohex-1-ene-1-carboxylate

Masami Yamada, Takashi Ichikawa, Masayuki Ii, Mie Sunamoto, Katsumi Itoh, Norikazu Tamura and Tomoyuki Kitazaki

Journal of Medicinal Chemistry, **48**(23): 7457-7467, 2005

山田昌美, 一川隆史, 伊井雅幸, 砂本美恵, 伊藤克己, 田村典一, 北崎智幸

Biochemistry and Biotechnology

[T15] Transgenic rats overexpressing the human MrgX3 gene show cataracts and an abnormal skin phenotype

Yoshihiko Kaisho, Takuya Watanabe, Mitsugu Nakata, Takashi Yano, Yoshitaka Yasuhara, Kozo Shimakawa [a], Ikuo Mori, Yasufumi Sakura [a], Yasuko Terao, Hideki Matsui and Shigehisa Taketomi

Biochemical and Biophysical Research Communications, **330**(3): 653-657, 2005

改正善彦, 渡辺卓也, 中田　貢, 矢野　隆, 安原吉高, 嶋川幸三 [a], 森　郁夫, 佐倉康文 [a], 寺尾寧子, 松井英紀, 武冨滋久

[a] Takeda RABICS Limited, Osaka, Japan

Microbiology

[T16] Highly Potent Inhibition of Human Immunodeficiency Virus Type 1 Replication by TAK-220, an Orally Bioavailable Small-Molecule CCR5 Antagonist

Katsunori Takashima, Hiroshi Miyake, Naoyuki Kanzaki, Yoshihiko Tagawa, Xin Wang [a], Yoshihiro Sugihara, Yuji Iizawa and Masanori Baba [a]

Antimicrobial Agents and Chemotherapy, **49**(8): 3474-3482, 2005

高島勝典, 三宅　洋, 神崎直之, 田川吉彦, 王　欣 [a], 杉原芳博, 飯沢祐史, 馬場昌範 [a]

[a] Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

[T17] TAK-220, a Novel Small-Molecule CCR5 Antagonist, Has Favorable Anti-Human Immunodeficiency Virus Interactions with Other Antiretrovirals *In Vitro*

Cécile L. Tremblay [a,c], Françoise Giguel [a], Yongbiao Guan [b], Ting-Chao Chou [b], Katsunori Takashima and Martin S. Hirsch [a]

Antimicrobial Agents and Chemotherapy, **49**(8): 3483-3485, 2005

高島勝典

[a] Massachusetts General Hospital, Infectious Diseases Unit, Harvard Medical School, Cambridge, Massachusetts, U.S.A.

[b] Memorial Sloan-Kettering Cancer Center, New York, U.S.A.

[c] Centre Hospitalier de l'Université de Montréal, Montréal, Canada

[T18] TAK-652 Inhibits CCR5-Mediated Human Immunodeficiency Virus Type 1 Infection *In Vitro* and Has Favorable Pharmacokinetics in Humans

Masanori Baba [a], Katsunori Takashima, Hiroshi Miyake, Naoyuki Kanzaki, Koichiro Teshima, Xin Wang [a], Mitsuru Shiraishi and Yuji Iizawa

Antimicrobial Agents and Chemotherapy, **49**(11): 4584-4591, 2005

馬場昌範 [a], 高島勝典, 三宅　洋, 神崎直之, 手島浩一郎, 王　欣 [a], 白石　充, 飯沢祐史

[a] Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima

[T19] Analysis of Binding Sites for the New Small-Molecule CCR5 Antagonist TAK-220 on Human CCR5

Masao Nishikawa [a], Katsunori Takashima, Toshiya Nishi, Rika A. Furuta [a], Naoyuki Kanzaki, Yoshio Yamamoto and Jun-ichi Fujisawa [a]

Antimicrobial Agents and Chemotherapy, **49**(11): 4708-4715, 2005

西川正雄 [a], 高島勝典, 西　俊哉, 古田里佳 [a], 神崎直之, 山本善雄, 藤澤順一 [a]

[a] Kansai Medical University, Osaka

[T20] TAK-652, a novel CCR5 inhibitor, has favourable drug interactions with other antiretrovirals *in vitro*

Cécile L. Tremblay [a,c], Françoise Giguel [a], Ting-Chao Chou [b], Huajin Dong [b], Katsunori Takashima and Martin S. Hirsch [a]

Antiviral Therapy, **10**(8): 967-968, 2005

高島勝典

[a] Massachusetts General Hospital, Infectious Diseases Unit, Harvard Medical School, Cambridge, MA, USA

[b] Memorial Sloan-Kettering Cancer Center, New York, NY, USA

[c] Centre Hospitalier de l'Université de Montréal, Montréal, Canada

[T21] A functional single nucleotide polymorphism in the core promoter region of *CALM1* is associated with hip osteoarthritis in Japanese

Hideyuki Mototani, Akihiko Mabuchi [a], Susumu Saito [b,†], Mikihiro Fujioka [c], Aritoshi Iida [a], Yoshio Takatori [d], Akihiro Kotani [e], Toshikazu Kubo [c], Kozo Nakamura [d], Akihiro Sekine [f], Yoshinori Murakami [g], Tatsuhiko Tsunoda [f], Kohei Notoya, Yusuke Nakamura [a,f] and Shiro Ikegawa [a]

Human Molecular Genetics, **14**(8): 1009-1017, 2005

本谷英之，馬渕昭彦 [a]，斉藤　督 [b,†]，藤岡幹浩 [c]，飯田有俊 [a]，高取吉雄 [d]，小谷明弘 [e]，久保俊一 [c]，中村耕三 [d]，関根章博 [f]，村上善則 [g]，角田達彦 [f]，能登谷浩平，中村祐輔 [a,f]，池川志郎 [a]

[a] SNP Research Center, The Institute of Physical and Chemical Research (RIKEN), Tokyo

[b] Sumitomo Hospital, Osaka

[c] Kyoto Prefectural University of Medicine, Kyoto

[d] Department of Orthopaedic Surgery, The University of Tokyo, Tokyo

[e] Department of Orthopaedic Surgery, Kyorin University, School of Medicine, Tokyo

[f] SNP Research Center, RIKEN, Yokohama

[g] National Cancer Center Research Institute, Tokyo

[†] Present address: Osaka Rosai Hospital, Osaka

Pharmacology

[T22] Pioglitazone, a peroxisome proliferator-activated receptor γ agonist, reduces the progression of experimental osteoarthritis in guinea pigs

Tetsuya Kobayashi, Kohei Notoya, Takako Naito, Satoko Unno, Akihiro Nakamura, Johanne Martel-Pelletier [a] and Jean-Pierre Pelletier [a]

Arthritis & Rheumatism, **52**(2): 479-487, 2005

小林哲弥, 能登谷浩平, 内藤貴子, 海野才斗子, 中村晃裕

[a] Centre Hospitalier de l'Université de Montréal, Canada

[T23] Effects of TAK-802, a novel acetylcholinesterase inhibitor, and tamsulosin, an α_1-adrenoceptor antagonist, and their synergistic effects on the urodynamic characteristics in a guinea-pig model of functional bladder outlet obstruction

Hiroshi Nagabukuro, Tadatoshi Hashimoto, Masashi Iwata and Takayuki Doi

BJU International, **95**(7): 1071-1076, 2005

長袋　洋, 橋本忠俊, 岩田雅史, 土居孝行

[T24] Fursultiamine, a vitamin B1 derivative, enhances chondroprotective effects of glucosamine hydrochloride and chondroitin sulfate in rabbit experimental osteoarthritis

Tetsuya Kobayashi, Kohei Notoya, Akihiro Nakamura and Kouji Akimoto

Inflammation Research, **54**(6): 249-255, 2005

小林哲弥, 能登谷浩平, 中村晃裕, 秋元浩二

[T25] Ramelteon (TAK-375) accelerates reentrainment of circadian rhythm after a phase advance of the light-dark cycle in rats

Keisuke Hirai, Muneto Kita, Hiroyuki Ohta, Hisao Nishikawa, Yuu Fujiwara, Shigenori Ohkawa and Masaomi Miyamoto

Journal of Biological Rhythms, **20**(1): 27-37, 2005

平井圭介, 北　宗人, 太田浩之, 西川久夫, 藤原　優, 大川滋紀, 宮本政臣

[T26] Novelty Stress Increases Fecal Pellet Output in Mongolian Gerbils: Effects of Several Drugs

Shiho Okano, Hideaki Nagaya and Nobuhiro Inatomi

Journal of Pharmacological Sciences, **98**(4): 411-418, 2005

岡野志保, 長屋秀明, 稲富信博

[T27] Differential effects of activation of peripheral and spinal tachykinin neurokinin$_3$ receptors on the micturition reflex in rats

Izumi Kamo, Michael B. Chancellor [a], William C. de Groat [a] and Naoki Yoshimura [a]

Journal of Urology, **174**(2): 776-781, 2005

加茂　泉, 吉村直樹 [a]

[a] University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

[T28] Effects of the selective acetylcholinesterase inhibitor TAK-802 on the voiding behavior and bladder mass increase in rats with partial bladder outlet obstruction

Tadatoshi Hashimoto, Hiroshi Nagabukuro and Takayuki Doi

Journal of Urology, **174**(3): 1137-1141, 2005

橋本忠俊, 長袋　洋, 土居孝行

[T29] Differential effects of TAK-802, a selective acetylcholinesterase inhibitor, and carbamate acetylcholinesterase inhibitors on contraction of the detrusor smooth muscle of the guinea pig

Hiroshi Nagabukuro and Takayuki Doi

Life Sciences, **77**(26): 3276-3286, 2005

長袋　洋, 土居孝行

[T30] Passive Immunization of the Aβ42(43) C-Terminal-Specific Antibody BC05 in a Mouse Model of Alzheimer's Disease

Asano Asami-Odaka, Yuka Obayashi-Adachi, Yoshio Matsumoto, Hideki Takahashi, Hiroaki Fukumoto, Takashi Horiguchi, Nobuhiro Suzuki and Mikio Shoji [a]

Neurodegenerative Diseases, **2**(1): 36-43, 2005

浅見麻乃，大林由佳，松本芳男，高橋秀樹，福元宏明，堀口隆司，鈴木伸宏，東海林幹夫 [a]

[a] Okayama University Graduate School of Medicine and Dentistry, Okayama

[T31] Neurochemical properties of ramelteon (TAK-375), a selective MT_1/MT_2 receptor agonist

Koki Kato, Keisuke Hirai, Keiji Nishiyama, Osamu Uchikawa, Kohji Fukatsu, Shigenori Ohkawa, Yuji Kawamata, Shuji Hinuma and Masaomi Miyamoto

Neuropharmacology, **48**(2): 301-310, 2005

加藤浩紀, 平井圭介, 西山啓次, 内川　治, 深津考司, 大川滋紀, 川俣裕二, 日沼州司, 宮本政臣

Basic Biology and Physiology

[T32] Loss of lysophospholipase 3 increases atherosclerosis in apolipoprotein E-deficient mice

Yoshio Taniyama, Hiromitsu Fuse, Tomoko Satomi, Ryuichi Tozawa, Yoshitaka Yasuhara, Kozo Shimakawa, Sachio Shibata, Masahiko Hattori, Mitsugu Nakata and Shigehisa Taketomi

Biochemical and Biophysical Research Communications, **330**(1): 104-110, 2005

谷山佳央, 布施広光, 里美朋子, 兎澤隆一, 安原吉高, 嶋川幸三, 柴田早智雄, 服部正彦, 中田　貢, 武冨滋久

[T33] Influence of atrazine administration and reduction of calorie intake on prostate carcinogenesis in probasin/SV40 T antigen transgenic rats

Hitoshi Kandori, Shugo Suzuki [a], Makoto Asamoto [a], Toshiya Murasaki [a], Tang Mingxi [a], Kumiko Ogawa [a] and Tomoyuki Shirai [a]

Cancer Science, **96**(4): 221-226, 2005

神鳥仁志, 鈴木周五 [a], 朝元誠人 [a], 村崎敏也 [a], 唐　明希 [a], 小川久美子 [a], 白井智之 [a]

[a] Nagoya City University Graduate School of Medical Sciences

[T34] Involvement of Central Metastin in the Regulation of Preovulatory Luteinizing Hormone Surge and Estrous Cyclicity in Female Rats

Mika Kinoshita [a], Hiroko Tsukamura [a], Sachika Adachi [b], Hisanori Matsui, Yoshihisa Uenoyama [a], Kinuyo Iwata [a], Shunji Yamada [a], Kinji Inoue [b], Tetsuya Ohtaki, Hirokazu Matsumoto and Kei-Ichiro Maeda [a]

Endocrinology, **146**(10): 4431-4436, 2005

木下美香 [a]，束村博子 [a]，足立幸香 [b]，松井久典，上野山賀久 [a]，岩田絹代 [a]，山田俊児 [a]，井上金治 [b]，大瀧徹也，松本寛和，前多敬一郎 [a]

[a] Graduate School of Bioagricultural Sciences , Nagoya University, Nagoya

[b] Faculty of Science , Saitama University, Saitama

[T35] Comparison of leak point pressure methods in an animal model of stress urinary incontinence

Deirdre A. Conway [a], Izumi Kamo, Naoki Yoshimura [a], Michael B. Chancellor [a] and Tracy W. Cannon [a]

International Urogynecology Journal and Pelvic Floor Dysfunction, **16**(5): 359-363, 2005

加茂　泉, 吉村直樹 [a]

[a] Pittsburgh School of Medicine, 3471 Fifth Avenue, Pittsburgh, U.S.A.

[T36] Mice lacking ghrelin receptors resist the development of diet-induced obesity

Jeffrey M. Zigman [a], Yoshihide Nakano [a], Roberto Coppari [a], Nina Balthasar [a], Jacob N. Marcus [a], Charlotte E. Lee [a], Juli E. Jones [a], Amy E. Deysher [a], Amanda R. Waxman [a], Ryan D. White [a], Todd D. Williams [a], Jennifer L. Lachey [a], Randy J. Seeley [b], Bradford B. Lowell [a] and Joel K. Elmquist[a,c]

Journal of Clinical Investigation, **115**(12): 3564-3572, 2005

中野嘉英

[a] Department of Medicine, Division of Endocrinology, Diabetes and Metabolism, Beth Israel Deaconess Medical Center (BIDMC), Harvard Medical School, USA

[b] Department of Psychiatry, University of Cincinnati, USA

[c] Department of Neurology, BIDMC and Program in Neuroscience, Harvard Medical School, USA

[T37] Involvement of cathepsins in the invasion, metastasis and proliferation of cancer cells

Toshiyuki Nomura and Nobuhiko Katunuma [a]

Journal of Medical Investigation, **52**(1-2): 1-9, 2005

野村俊之, 勝沼信彦 [a]

[a] Tokushima Bunri University, Institute for Health Science, Tokushima

[T38] An aspartic acid repeat polymorphism in asporin inhibits chondrogenesis and increases susceptibility to osteoarthritis

Hideki Kizawa, Ikuyo Kou [a], Aritoshi Iida [a], Akihiro Sudo [b], Yoshinari Miyamoto [a], Akira Fukuda [c], Akihiko Mabuchi [a], Akihiro Kotani [d], Akira Kawakami [e], Seizo Yamamoto [f], Atsumasa Uchida [b], Kozo Nakamura [c], Kohei Notoya, Yusuke Nakamura [a] and Shiro Ikegawa [a]

Nature Genetics, **37**(2): 138-144, 2005

木澤秀樹, 黄　郁代 [a], 飯田有俊 [a], 須藤啓広 [b], 宮本恵成 [a], 福田　明 [c], 馬渕昭彦 [a], 小谷明弘 [d], 川上　明 [e], 山本精三 [f], 内田淳正 [b], 中村耕三 [c], 能登谷浩平, 中村祐輔 [a], 池川志郎 [a]

[a] SNP Research Center, The Institute of Physical and Chemical Research (RIKEN), Tokyo

[b] Mie University Faculty of Medicine, Mie

[c] Department of Orthopaedic Surgery, The University of Tokyo, Tokyo

[d] Kyorin University, School of Medicine, Tokyo

[e] Tokyo Teishin Hospital, Tokyo

[f] Tokyo Metropolitan Geriatric Hospital, Tokyo

[T39] Estrogen suppresses the stress response of prolactin-releasing peptide-producing cells

Sachika Adachi [a], Akikazu Mochiduki [a], Haruki Nemoto [a], Binggui Sun [a], Ken Fujiwara [a,b], Hirokazu Matsumoto and Kinji Inoue [a]

Neuroscience Letters, **380**(3): 311-315, 2005

足立幸香 [a], 望月明和 [a], 根本春樹 [a], 藤原　研 [a,b], 松本寛和, 井上金治 [a]

[a] Faculty of Science, Saitama University, Saitama

[b] Jichi Medical School, Tochigi

[T40] Hippocalcin-deficient mice display a defect in cAMP response element-binding protein activation associated with impaired spatial and associative memory

Masaaki Kobayashi [a], Tamotsu Masaki [a], Kohji Hori [b], Yoshinori Masuo [c], Masaomi Miyamoto, Hiroshi Tsubokawa [d], Hajime Noguchi [a], Masahiko Nomura [e] and Ken Takamatsu [a]

Neuroscience, **133**(2): 471-484, 2005

小林正明 [a], 正木 全 [a], 堀 耕治 [b], 増尾好則 [c], 宮本政臣, 坪川 宏 [d], 野口 一 [a], 野村正彦 [e], 高松 研 [a]

[a] Department of Physiology, Toho University School of Medicine, Tokyo

[b] Department of Psychology, Rikkyo University, Tokyo

[c] National Institute of Advanced Industrial Science and Technology, Ibaraki

[d] Laboratory of Life Fluctuomatics, Graduate School of Information Sciences, Tohoku University, Miyagi

[e] Department of Physiology, Saitama Medical School, Saitama

[T41] The Nkx6.1 homeodomain transcription factor suppresses glucagon expression and regulates glucose-stimulated insulin secretion in islet beta cells

Jonathan C. Schisler [a], Per Bo Jensen [a], David G. Taylor [b], Thomas C. Becker [a], Filip Krag Knop [a], Shiro Takekawa, Michael German [c], Gordon C. Weir [d], Danhong Lu [a], Raghavendra G. Mirmira [b] and Christopher B. Newgard [a]

Proc. Natl. Acad. Sci. U.S.A., **102**(20): 7297-7302, 2005

竹河志郎

[a] Duke University Medical Center, USA

[b] University of Virginia Medical Center, USA

[c] Department of Internal Medicine, University of California, USA

[d] Joslin Diabetes Center, USA

[T42] Electron microscopy examination of galanin-like peptide (GALP)-containing neurons in the rat hypothalamus

Jian-Lian Guan [a], Haruaki Kageyama [a], Qing-Ping Wang [a], Fumiko Takenoya [a,b], Tetsuro Kita [a], Hirokazu Matsumoto, Tetsuya Ohtaki and Seiji Shioda [a]

Regulatory Peptides, **126**(1-2): 73-78, 2005

管 建蓮 [a], 影山晴秋 [a], 王 慶平 [a], 竹ノ谷文子 [a,b], 北 徹朗 [a], 松本寛和, 大瀧徹也, 塩田清二 [a]

[a] Showa University School of Medicine, Tokyo

[b] Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo

[T43] Neuronal interactions between galanin-like-peptide- and orexin- or melanin-concentrating hormone-containing neurons

Fumiko Takenoya [a,b], Masami Hirayama [a], Haruaki Kageyama [a], Hisayuki Funahashi [a], Tetsuro Kita [a], Hirokazu Matsumoto, Tetsuya Ohtaki, Sachi Katoh [a], Masao Takeuchi [b] and Seiji Shioda [a]

Regulatory Peptides, **126**(1-2): 79-83, 2005

竹ノ谷文子 [a,b], 平山優美 [a], 影山晴秋 [a], 舟橋久幸 [a], 北　徹朗 [a], 松本寛和, 大瀧徹也, 加藤佐知 [a], 竹内正雄 [a], 塩田清二 [a]

[a] Showa University School of Medicine, Tokyo

[b] Hoshi University School of Pharmacy and Pharmaceutical Sciences, Tokyo

[T44] Identification of the prolactin-releasing peptide-producing cell in the rat adrenal gland

Ken Fujiwara [a,b], Hirokazu Matsumoto, Toshihiko Yada [b] and Kinji Inoue [a]

Regulatory Peptides, **126**(1-2): 97-102, 2005

藤原　研 [a,b], 松本寛和, 矢田俊彦 [b], 井上金治 [a]

[a] Faculty of Science, Saitama University, Saitama

[b] Jichi Medical School, Tochigi

[T45] Possible role of adaptive mutation in resistance to antiandrogen in prostate cancer cells

Takahito Hara, Jin Kouno, Kazuyo Nakamura, Masami Kusaka and Masuo Yamaoka

The Prostate, **65**(3): 268-275, 2005

原　隆人, 河野　仁, 中村和世, 日下雅美, 山岡万寿夫

Pharmaceutics

[T46] Application of an electronic nose system for evaluation of unpleasant odor in coated tablets

Shinji Ohmori, Yasuo Ohno, Tadashi Makino and Toshio Kashihara

European Journal of Pharmaceutics and Biopharmaceutics, **59**(2): 289-297, 2005

大森真治, 大野泰雄, 槙野　正, 柏原俊夫

Pharmacokinetics and Drug Metabolism

[T47] Analytical method for ubiquinone-9 and ubiquinone-10 in rat tissues by liquid chromatography/turbo ion spray tandem mass spectrometry with 1-alkylamine as an additive to the mobile phase

Koichiro Teshima and Takahiro Kondo

Analytical Biochemistry, **338**(1): 12-19, 2005

手島浩一郎, 近藤孝浩

Drug Safety Evaluation

[T48] Improved technique for fetal heart examination in developmental toxicity studies in rats

Hiroo Kanamori, Nobuyuki Seki, Takeshi Sugimoto and Yojiro Ooshima

Congenital Anomalies, **45**(1): 32-34, 2005

金森宏夫, 関　将章, 杉本武志, 大島洋次郎

[T49] A Toxicogenomic Approach to Drug-Induced Phospholipidosis: Analysis of Its Induction Mechanism and Establishment of a Novel *in Vitro* Screening System

Hiroshi Sawada, Kenji Takami and Satoru Asahi

Toxicological Sciences, **83**(2): 282-292, 2005

沢田　啓, 高見健治, 朝日　知

Originals in Japanese

Analytical Chemistry

[T50] FT-ラマン分光法を用いた製剤中の主薬結晶多形及び無結晶の簡易定量法
上野高裕, 浦上康司, 東　篤也, 梅本和一, 神戸正幸 [a], 北村桂介 [b]
薬学雑誌, **125**(10): 807-814, 2005
A Simple Method for Quantitative Determination of Active Drug Polymorphs and Amorphous in Drug Products by Fourier Transform-Raman Spectroscopy
Takahiro Ueno, Koji Urakami, Atsuya Higashi, Kazuichi Umemoto, Masayuki Godo [a] and Keisuke Kitamura [b]
Journal of the Pharmaceutical Society of Japan, **125**(10): 807-814, 2005
[a] Takeda analytical Research Laboratories, LTD., Osaka
[b] Department of Analytical Chemistry, Kyoto Pharmaceutical University, Kyoto

Medicinal Chemistry

[T51] 経口 CCR5 拮抗薬 TAK-220 の創製
杉原芳博, 今村真一
MEDCHEM NEWS, **15**(4): 24-29, 2005
Discovery of TAK-220, an Orally Bioavailable CCR5 Antagonist
Yoshihiro Sugihara and Shinichi Imamura
MEDCHEM NEWS, **15**(4): 24-29, 2005

Pharmacology

[T52] 胃出血,胃粘膜損傷形成および胃酸分泌に対する AG-1749 静脈内投与の作用
― オメプラゾールおよび塩酸ロキサチジンアセートとの比較 ―
佐藤文彦, 久徳順政, 堀　有里, 堀　靖亘, 岡野志保, 稲富信博
薬理と治療, **33**(2): 113-122, 2005
Effects of Intravenous AG-1749 on Gastric Bleeding, Mucosal Lesions and Acid Secretion in Comparison with Those of Omeprazole and Roxatidine Acetate Hydrochloride
Fumihiko Sato, Toshimasa Kyutoku, Yuri Hori, Yasunobu Hori, Shiho Okano and Nobuhiro Inatomi
Japanese Pharmacology and Therapeutics, **33**(2): 113-122, 2005

[T53] セラペプターゼの抗炎症作用
守谷教彦, 浅野正一, 朝日　知
薬理と治療, **33**(9): 953-962, 2005
Anti-inflammatory Activity of Serrapeptase
Norihiko Moriya, Shoichi Asano and Satoru Asahi
Japanese Pharmacology and Therapeutics, **33**(9): 953-962, 2005

Basic Biology and Physiology

[T54] 2型糖尿病の自然発症モデル動物
武冨滋久
内分泌・糖尿病科, **20**(Suppl.2): 485-493, 2005
Spontaneously diabetic animal models of type 2 diabetes
Shigehisa Taketomi
Endocrinology & Diabetology, **20**(Suppl.2): 485-493, 2005

[T55] 新規の膜型長鎖脂肪酸受容体, GPR40
益崎裕章[a], 日沼州司, 中尾一和[a]
医学のあゆみ, **212**(1): 112-116, 2005
A novel membrane-bound, long chain fatty acid receptor, GPR40
Hiroaki Masuzaki[a], Shuji Hinuma and Kazuwa Nakao[a]
Progress in Medicine, **212**(1): 112-116, 2005
[a] Division of Endocrinology and Metabolism, Department of Medicine and Clinical Science, Kyoto University Graduate School of Medicine

Pharmaceutics

[T56] シュガーレス薄層糖衣
大森真治
FFI ジャーナル, **210**(5): 402-409, 2005
Thin-Layer Sugarless Coating
Shinji Ohmori
Foods & Food Ingredients Journal of Japan, **210**(5): 402-409, 2005

[T57] 糖衣錠およびシュガーレス薄層糖衣錠の設計と評価に関する研究
大森真治
粉体工学会誌, **42**(7): 504, 2005
Design and Evaluation of Sugar-coated and Thin-layer Sugarless Coated Tablets
Shinji Ohmori
Journal of the Society of Powder Technology, Japan, **42**(7): 504, 2005

Drug Safety Evaluation

[T58] シルマー試験紙を利用したマウス、ラットおよびイヌにおける涙液分泌量評価
白木武志, 繁田真樹, 田原紀子, 古川初江, 大塚博比古
比較眼科研究, **24**(1-2): 1-5, 2005
A Tear Production Assessment by Using Schirmer Tear Test Strips in Mice, Rats and Dogs
Takeshi Shiraki, Masaki Shigeta, Noriko Tahara, Hatsue Furukawa and Hirohiko Ohtsuka
Animal Eye Research, **24**(1-2): 1-5, 2005

Technology Development

[T59] 造粒技術への挑戦 ！！
流動層造粒による打錠用顆粒の設計とスーパースケールアップ
槙野　正
製剤機械技術研究会誌, **14**(1): 5-15, 2005
New Challenges for Granulation Technology :
Desigin and Super Scale-Up of Fluidized-Bed Granulation for Tablet Manufacturing
Tadashi Makino
Journal of Japan Society of Pharmaceutical Machinery and Engineering, **14**(1): 5-15, 2005

Supplement

Originals in English(2004)

Analytical Chemistry

[T60] Investigation of Intermolecular Interaction in Molecular Complex of Tryptamine and Benzoic Acid by Solid-State 2D NMR
Akira Terakita, Hirokazu Matsunaga, Takahiro Ueda [a], Taro Eguchi [a], Midori Echigoya, Kazuichi Umemoto and Masayuki Godo
Chemical & Pharmaceutical Bulletin, **52**(5): 546-551, 2004
寺北　晃, 松永浩和, 上田貴洋 [a], 江口太郎 [a], 越後谷みどり, 梅本和一, 神戸正幸
[a] The Museum of Osaka University and Department of Chemistry, Graduate School of Science, Osaka University, Osaka

Pharmacology

[T61] Pioglitazone Reduces Islet Triglyceride Content and Restores Impaired Glucose-Stimulated Insulin Secretion in Heterozygous Peroxisome Proliferator–Activated Receptor-γ–Deficient Mice on a High-Fat Diet

Junji Matsui, Yasuo Terauchi [b], Naoto Kubota [a,b], Iseki Takamoto [a,b], Kazuhiro Eto [a,b], Tokuyuki Yamashita [a], Kajuro Komeda [c], Toshimasa Yamauchi [a,b], Junji Kamon [a], Shunbun Kita [a], Mitsuhiko Noda [b,d] and Takashi Kadowaki [a]

Diabetes, **53**(11): 2844-2854, 2004

松井純二, 寺内康夫 [b], 窪田直人 [a,b], 高本偉碩 [a,b], 江藤一弘 [a,b], 山下篤行 [a], 米田嘉重郎 [c], 山内敏正 [a,b], 加門淳司 [a], 喜多俊文 [a], 野田光彦 [b,d], 門脇　孝 [a]

[a] Department of Metabolic Diseases, Graduate School of Medicine, University of Tokyo, Tokyo

[b] Core Research for Evolutional Science and Technology (CREST), Japan Science and Technology Corporation (JST), Kawaguchi

[c] Division of Laboratory Animal Science, Animal Research Center, Tokyo Medical University, Tokyo

[d] Institute for Diabetes Care and Research, Asahi Life Foundation, Tokyo

Originals in Japanese(2004)

Basic Biology and Physiology

[T62] ラット網膜電図の概日リズム及び制御機構

大塚博比古

広島大学医学雑誌, **52**(4-6): 47-56, 2004

Circadian Rhythm of the Electroretinogram and the Control System in Rats

Hirohiko Ohtsuka

Medical Journal of Hiroshima University, **52**(4-6): 47-56, 2004

[T63] 新規 RF アミドペプチド

羽畑祐吾

医学のあゆみ, **210**(4): 250-255, 2004

Novel RFamide peptide

Yugo Habata

Progress in Medicine, **210**(4): 250-255, 2004

Author Index

［ **K** ］

［ **L** ］

［ **M** ］

［ **N** ］

［ **O** ］

［ **P** ］

［ **R** ］

［ **S** ］

［ **T** ］

［ **U** ］

［ **W** ］

［ **Y** ］

［ **Z** ］