

Jun Okabe^{*1}, Akiko Eguchi^{*1,5}, Renu Wadhwa^{*1}, Randeep Rakwal^{*2}, Rumi Tsukinoki^{*4}, Takao Hayakawa^{*5} and Mahito Nakanishi^{#*1,6}: **Limited Capacity of the Nuclear Matrix to Bind Telomere Repeat Binding Factor TRF1 May Restrict the Proliferation of Mortal Human Fibroblasts**

Human Molecular Genetics, **13**, 1-9 (2004)

Keywords: telomere repeat binding factor, telomere integrity, prolonged cell proliferation

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小嶋 茂雄, 檜山 行雄, 寺下 敏次郎, 柳原 義彦: 医薬品の品質管理における Process Analytical Technology (PAT) の活用 - 欧米の活発な動きにわが国はどう対応するのか? -

ファームテクジャパン, **19**, 1471-1489 (2003)

Keywords: Quality control of pharmaceuticals, process analytical technology (PAT), Concerns on applying PAT in Japan

小嶋 茂雄, 山田 哲, 神谷 明良, 寺田 勝英: PAT (Process Analytical Technology) の課題・将来展望 (座談会)

ファームテクジャパン, **19**, 1491-1504 (2003)

Keywords: Quality control of pharmaceuticals, Process analytical technology (PAT), How to promote PAT in Japan

小嶋 茂雄, 太谷 淑郎: 品質にかかわるトピックの動向 - Q3B(R) -

医薬品研究, **34**, 451-474 (2003)

Keywords: Revision of ICH Guideline Q3B, Impurity in drug products, Revision of rounding rule

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ファームテクジャパン, **20**, 429-443 (2004)

Keywords: Level up of quality assurance for pharmaceuticals, Issues to be solved in Japan, Collaboration of people in industries, regulatory sides and academies

Aoyagi, N., Rimando, A. P., Izutsu, K., Katori, N., Kojima, S.: **Abnormal dissolution of chlorpromazine hydrochloride**

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Keywords : dissolution test, chlorpromazine hydrochloride tablet, change in pH

Izutsu, K., Rimando, A.*, Aoyagi, N., Kojima, S.: **Effect of sodium tetraborate (borax) on the thermal properties of frozen aqueous sugar and polyol solutions.**

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^{*} Bureau of Food and Drugs, Philippines

Izutsu, K., Ocheda, S. O.*, Aoyagi, N., Kojima, S.: **Effects of sodium tetraborate and boric acid on nonisothermal mannitol crystallization in frozen solutions and freeze-dried solids.**

Int. J. Pharm., **273**, 85-93 (2004)

Keywords: freeze-drying, amorphous, complexation

^{*} Bureau of Food and Drugs, Philippines

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Chem. Pharm. Bull., **52**, 199-203 (2004)

Keywords: freeze-drying, protein formulation, stabilization

伊豆津 健一, 青柳 伸男, 小嶋 茂雄: ホウ素-ポリオール錯体凍結水溶液の物性と凍結乾燥時のタンパク質安定化作用

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Keywords: freeze-drying, protein formulation, stabilization

Yoshioka, S., Aso, Y., Kojima, S.: **Molecular mobility of lyophilized poly(vinylpyrrolidone) and methyl cellulose as determined by the laboratory and rotating frame spin-lattice relaxation time of ¹H and ¹³C**

Chem. Pharm. Bull., **51**, 1289-1292 (2003)

Keywords: molecular mobility, NMR, glass transition

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Pharm. Res., **20**, 1655-1660 (2003)

Keywords: aggregation, molecular mobility, glass transition

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Pharm. Res., **20**, 873-878 (2003)

Keywords: molecular dynamics simulation, glass transition temperature, lyophilized formulation

Yoshioka, S., Aso, Y., Kojima, S.: **Temperature- and glass tran-**

sition temperature-dependence of biomolecular reaction rates in lyophilized formulations described by Adam-Gibbs-Vogel equation

J. Pharm. Sci., **93**, 1062-1069 (2004)

Keywords: lyophilized formulation, glass transition temperature, molecular mobility

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Keywords: Crystallization, Stability, Relaxation time

坂本知昭, 檜山行雄, 小嶋茂雄:品質管理における保証システムのあり方 その1 クロマトグラフ分析におけるデータ評価と品質保証システムのあり方 - 分析のばらつきが試験判定に与える影響 -

ファームテックジャパン **20**, 65-72 (2004)

Keywords: quality risk management, HPLC analysis, double standard

小山 靖人, 檜山 行雄:品質保証システムの構築を目的とした今後のGMPのあり方 - 薬事法改正とGMPのグローバル化に対応して 1 .

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ファームテックジャパン **19**, 1533-1543 (2003)

Keywords: Good Manufacturing Practices(GMP), Quality Assurance, Pharmaceutical Affair Law

Ishii-Watabe, A., Uchida, E., Iwata, A.^{*1}, Nagata, R., Satoh, K.^{*1}, Fan, K.^{*2}, Murata, M.^{*2}, Mizuguchi, M., Kawasaki, N., Kawanishi, T., Yamaguchi, T., and Hayakawa, T.: **Detection of replication-competent adenoviruses spiked into recombinant adenovirus vector products by infectivity-PCR**

Molecular Therapy, **8**, 1009-1016 (2003)

^{*1}埼玉県赤十字血液センター

^{*2}JSR-KK筑波研究所

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Tanaka, H.^{*}, Kawanishi, T., Shigenobu, K.^{*}: **Optical Bioimaging: From Living tissue to a single molecule: atrio-Ventricular difference in myocardial excitation-contraction coupling & Sequential verses simultaneous activation of SR Ca²⁺ release units**, *J. Pharmacol. Sci.*, **93**, 248-252 (2003)

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Tanaka, H.^{*}, Kawanishi, T., Shigenobu, K.^{*}: **Atrio-ventricular difference in myocardial excitation-contraction coupling -- influence of T-tubules and endocardial endothelium --**, *Recent. Res. Devel. Physiol.*, **1**, 253-262 (2003)

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Key words: calcium, cardiomyocyte, EC-coupling

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Kobayashi, T., Kawai, H., Suzuki, T., Kawanishi, T., and Hayakawa, T.: **Improved sensitivity for insulin in matrix-assisted laser desorption/ionization time-of-flight mass spectrometry by premixing -cyano-4-hydroxycinnamic acid matrix with transferrin**

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Key words: protein, MALDI, TOF MS, CHCA

Yomura, K.^{*1}, Nakamura, Y.^{*1}, Ishimatsu, M.^{*1}, Kikuchi, Y.^{*1}, Hashimoto, K.^{*1}, Sakakibara, I.^{*1}, Terabayashi, S.^{*1}, Higuchi, M.^{*1}, Amagaya, S.^{*1}, Aburada, M.^{*1}, Okada, M.^{*1}, Kondo, S.^{*2}, Arimoto, K.^{*3}, Aimi, N.^{*4}, Goda, Y., Sekita, S., Satake, M^{*5}. : **Assay for the Total Alkaloids in Uncaria Thorn by HPLC** ", *Iyaku hinkenkyu*, **35**(3), 143-165 (2004).

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^{*3}日本生薬連合会

^{*4}千葉大薬学部

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Isolation and structural elucidation of some procyanidins

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Keywords : @psilocin, psilocybin, concise large-scale synthesis

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Keywords: MDMA, hair, HPLC-fluorescence

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Kawahara, N., Inoue, M., Kawai, K.*¹, Sekita, S., Satake, M.*² Yukihiko Goda: Diterpenoid from *Salvia greggii**Phytochemistry*, **63** (8) 859-862 (2003).Key words salvigresin; *Salvia greggii*; autumn sage¹ 星葉科大学² お茶の水女子大**Kuroyanagi, M.*¹, Kawahara, N., Sekita, S., Satake, M., Hayashi, T.*², Takase, Y.*², Masuda, K.*³: Dammarane-Type Triterpenes from the Brazilian Medicinal Plant *Cordia multispicata****J. Nat. Prod.*, **66** (10), 1307-1312, (2003).¹ 広島県立大学生物資源学部² ライオン(株)³ 昭和薬科大学**Gao, H.*¹, Wu, L.*¹, Kuroyanagi, M.*², Harada, K.*², Kawahara, N., Nakane, T., Umehara, K.*³, Hirasawa, A.*³, Nakamura, Y.*³: Antitumor-Promoting Constituents from *Chaenomeles sinensis* KOEHN and Their Activities in JB6 Mouse Epidermal Cells***Chem. Pharm. Bull.*, **51** (11), 1318-1321 (2003).Key words antitumor-promoting constituent; JB6 mouse epidermal cell; (*Chaenomeles sinensis*);¹ 潘陽薬科大学² 広島県立大学生物資源学部³ 静岡県立大学薬学部**Nahoko Uchiyama, Michiho Ito,*³ Fumiyuki Kiuchi, Gisho Honda,*¹, Yoshio Takeda,*² Olimjon K. Khodzhimatov,*³ and Ozodbek A. Ashurmetov*³ : A trypanocidal Diterpene with Novel Skeleton from *Dracocephalum komarovii****Tetrahedron Letters* **45**, 531 -533 (2004)Keywords: *Dracocephalum komarovii*; diterpene; spiro lactone; *Trypanosoma cruzi*; trypanocidal activity.¹:Graduate School of Pharmaceutical Sciences, Kyoto University,²:Faculty of Integrated Arts and Sciences, The University of Tokushima, ,³:Scientific Production Center " Botanika " of Uzbek Academy of Sciences,**Satoh, K.*¹, Iwata, A., Murata, M.*², Hikata, M.*², Hayakawa, T. and Yamaguchi, T.: Virus Concentration Using Polyethyleneimine-conjugated magnetic beads for improvement of sensitivity in nucleic acid amplification tests***J. Virol. Methods*, **114**, 11-19 (2003)¹ Institute of Saitama Red Cross² JSR Corporation**Iwata, A., Satoh, K.*¹, Murata, M.*², Hikata, M.*², Hayakawa, T. and Yamaguchi, T.: Virus concentration using sulfonated magnetic beads to improve sensitivity in nucleic acid amplification tests.***Biol. Pharm. Bull.*, **26**, 1065-1069 (2003)

Key words: PCR, virus, divalent cation,

¹ Institute of Saitama Red Cross² JSR Corporation**Iwata, A., Yamaguchi, T., Satoh, K.*¹, Izumi, R.*² and Tomoda, A.*²: Antiviral activity of 2-amino-4,4-dehydro-4,7-dimethyl-3H-phenoxyazine-3-one on Poliovirus.***Tohoku J. Exp. Med.*, **200**, 161-165 (2003)

Keywords: poliovirus, antiviral effect,

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crosomes*Mutation Res.*, **557**, 159-165 (2004)

Keywords: cII, CYP1A2, aza-substitution

^{*1} 名古屋市立大学大学院薬学研究科^{*2} エーザイ(株)

Yamada, K.*¹, Suzuki, T., Kohara, A., Hayashi, M., Mizutani, T.*¹ and Saeki, K.*²: **In vivo mutagenicity of benzo[f]quinoline, benzo[h]quinoline, and 1,7-phenanthroline using the lacZ transgenic mice**

Mutation Res., **559**, 83-95 (2004)

Keywords: cII, aza-substitution, mutation spectrum

^{*1} 名古屋市立大学大学院薬学研究科

Arlt, V.M.*¹, Zhan, L., Schmeiser, H.H.*², Honma, M., Hayashi, M., Phillips, D.H.*¹ and Suzuki, T.: **DNA adducts and mutagenic specificity of the ubiquitous environmental pollutant 3-nitrobenzanthrone in Muta Mouse**

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Keywords: 3-nitrobenzanthrone, diesel exhaust, DNA adduct

^{*1} Institute of Cancer Research, Surrey, UK^{*2} German Cancer Research Center, Heidelberg, Germany

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Keywords: human neutrophils, L-plastin, NADPH oxidase

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Key words: c-Myc, p70 S6 kinase, G-CSF

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Keywords: DEHP, PVC products, risk assessment

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Keywords: artificial ion-channel, protein-ligand interaction, syn-

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Keywords: sulfated peptide, cholecystokinin, peptide thioester

^{*1} Niigata University of Pharmacy and Applied Life Sciences^{*2} Institute for Chemical Research, Kyoto University^{*3} Institute for Frontier Medical Sciences, Kyoto University

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Environmental Dermatology, **10** (1), 33-38 (2003)

Keywords: rubber knee belt, allergic contact dermatitis, mercaptobenzothiazole-type accelerator

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J. Toxicol. Cut. & Ocular Toxicol., **22**, 169-185 (2003)

Keywords: rubber, extraction medium, sensitization potency

^{*1} Consultant^{*2} Hatano Research Institute, Food and Drug Safety Center^{*3} Chitose Institute, Japan Food Research Laboratories^{*4} National Institute for Public Health and the Environment, The Netherlands^{*5} Odense University Hospital, University of Southern Denmark^{*6} University Hospital of Copenhagen

Matsuoka, A., Lundin, C.*¹, Johansson, F.*¹, Sahlin, M.*¹, Fukuura, K., Sjoberg, BM*, Jenssen, D.*¹, Onfelt, A.*¹: **Correlation of sister chromatid exchange formation through homologous recombination with ribonucleotide reductase inhibition**

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chip

J. Nutr. Sci. Vitaminol., **49**, 125-132 (2003)

Keywords: DNA micro array, polyunsaturated fatty acid, HepG2 cells

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Keywords: sesamin, capsaicin, 5 desaturase mRNA

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Biomaterials, **24**, 3303-3309 (2003)

Keywords: poly(L-lactide); MC3T3-E1 cells; osteoblast differentiation

Kim, J.-G.*¹, Lee, Y.-W.*², Shintani, H.: **Reduction of aflatoxins by Korean soybean paste and its effect on cytotoxicity and reproductive toxicity Part 2. Antigenotoxic effects of the methanol extract of Korean soybean paste (Doen-jang) on aflatoxin B1-induced bacterial reverse mutation and chromosome aberration**

J. Food Protection, **66**, 431-435 (2003)

Keywords: aflatoxins, soybean paste, genotoxicity

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J. Food Protection, **66**, 866-873 (2003)

Keywords: aflatoxins, soybean paste, cytotoxicity

*¹ Keimyung University

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Chromatographia, **58**, 193-199 (2003)

Keywords: sterilization, bisphenol S, 4-chloro-4'-hydroxy diphenyl sulfone

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J. Hosp. Infect., **56**, 42-48 (2004)

Keywords: air sampler, airborne microorganism, soybean casein digest agar

*¹ Minofagen Pharmaceutical Co.

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Keywords: ozone gas sterilization, decimal reduction value, carrier material

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Keyword: polyurethane, cancer formation, density

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Keywords: human antibody, interleukin-2, interleukin-4

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Biosci. Biotechnol. Biochem., **67**, 815-821 (2003)

Keywords: TGF-, senescence, telomere shortening

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Biochem. Biophys. Res. Commun., **307**, 80-85 (2003)

Keywords: Connexin 32, Hep G2, Bioartificial liver

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Biochem. Biophys. Res. Commun., **315**, 603-611 (2004)

Keywords: sulfated hyaluronan, Osteoblasts, Connexin43

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Keywords : polyethylene terephthalate (PET), formaldehyde, acetaldehyde

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Jong-Chul Park^{*1}, Min Sub Lee^{*1}, Dong-Wook Han^{*1}, Dong Hee Lee^{*1}, Bong Joo Park^{*1}, Masakazu Uzawa^{*2} and Kosuke Takatori
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Keywords: bacteria, low amperage electric current, seawater

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Keywords: ソフトコンタクトレンズ, 真菌, 低真空走査電子顕微鏡

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Keywords: indoor environment, adhesion, early stage of fungal growth

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Keywords: vegetables, pathogenic bacteria,proliferation

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*⁴ The Dow Chemical Co., USA

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Keywords: FXR, bile acids, ligand

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