Poster Session 1 Day 1 Nov.17 (Tue)

1 Cell culture engineering

Odd Numbers: 17:00-18:00
Even Numbers: 18:00-19:00

P1-01 Fluid-Flow Characterization in Stirred Single-Use Bioreactors using Computational Fluid Dynamics

Tomomi Matsuura[1], Diana Kreitmayer[2], Srikanth Gopireddy[2], Yuichi Aki[1], Yuta Katayama[1], Shizuka Kondo[1], Hirofumi Kakihara[1], Nora Urbanetz[2], Koichi Nonaka[1], Masayuki Yabuta[1]
[1]Daiichi Sankyo Co., LTD., [2]Daiichi-Sankyo Europe GmbH

P1-02 Novel chemical compounds screening for enhancement of monoclonal antibody production in Chinese hamster ovary cell culture

Yuichi Aki[1, 2], Yuta Katsumata[1], Hirofumi Kakihara[1], Koichi Nonaka[1], Kenshu Fujiwara[2]
[1]Daiichisankyo. Co., LTD., [2]Akita University

P1-03 Development Studies of An Initial culture process for CHO-MK cells, Unveil Their Potential as A Fast-Growing Cell Line with High Productivity

Junshin Iwabuchi, **Zhaleh Nezhad**, Masashi Nasukawa, Kayo Nishida, Michi Kubota, Takayuki Horiuchi
Chitose Laboratory Corp.

P1-04 Demonstration of Automatic VCD and Glucose-concentration Control with In-line Sensors in Perfusion CHO Cell Culture

Tetsushi Namatame[1, 2], Yukihiro Nakamura[1, 2], Himuro Hashimoto[1, 2], Nobuto Kurihara[1, 2], Ayumu Sakaki[1]
[1]Yokogawa Electric Corporation, [2]Manufacturing Technology Association of Biologics

P1-05 Establishment Of IgG1 Producing Chinese Hamster Ovary Cells With The Same Vector Integration Site And Number And With Different Chromosome Number Distribution Between The Sub-clones

Hirofumi Hata, Yuto Nakanishi, Wataru Tanaka, Yuichi Koga, Yamano-Adachi Noriko, Takeshi Omasa
Osaka Univ.

P1-06 Benchmark Study of Commercially Available Serum-free Media for CHO Cell Culture

Masayoshi Onitsuka[1], Atsuko Shimazu[2]
[1]Graduate School of Technology, Industry and Social Science, Tokushima University,
[2]Manufacturing Technology Association of Biologics

P1-07 Automated Aseptic Sampling System for Maintaining Cell Culture Integrity in the Long Term

Shota Ito, Tomohiro Tokura, Hiroyuki Matsuda
FUJIMORI KOGYO CO., LTD.

P1-08 Rapid Identification of Production Enhancer Gene (PEG) for Recombinant Antibody Production in CHO Cells

Yuika Hirata[1], Hiroe Amou[2], Atsuko Shimazu[2], Masayoshi Onitsuka[2, 3]
[1]Graduate Schools of Science and Technology for Innovation, Tokushima University,
[2]Manufacturing Technology Association of Biologics,
[3]Graduate School of Technology, Industry and Social Science

P1-09 Application of Novel Platform Media Designed for mAb-Producing CHO-MK Cell Lines in Fed-Batch and Perfusion Cultures

Susumu Nejigane[1, 2], Chizuko Kobayashi[1, 2], Kaori Fueki[1, 2], Naoki Maeda[1, 2], Hisashi Saeki[1, 2]
[1]FUJIFILM Wako Pure Chemical Corporation, [2]Manufacturing Technology Association of Biologics (MAB)

P1-10 Generation of a New CHK Cell Line with Inducible Differentiation for Enhanced Expression of Recombinant Antibody

Yoshinori Kawabe, Hirotaka Nishina, Ryusei Iwao, Masamichi Kamihira
Dept. Chem. Eng., Fac. Eng., Kyushu University, Japan

P1-11 Demonstrating Scale-up Between the 50 L and the 500 L Allegro™ STR Single-Use Bioreactors Using Well-Defined Engineering Parameters for a CHO Cell-Line Expressing a Recombinant mAb

Kohei Natori
Nihon Pall Ltd.

2 Production of biologicals

P1-12 Novel Perfusion Filter and Controller for N-1 Application

Takao Ito
Merck Ltd.

P1-13 Cold-inducible Recombinant Antibody Production by CHO Cells Using a Transactivator-mediated Gene Expression System

Feiyang Zheng[1], Yoshinori Kawabe[2], Masamichi Kamihira[2]
[1]Grad. Sch. Sys. Life Sci., Kyushu University, Japan,
[2]Dept. Chem. Eng., Fac. Eng., Kyushu University, Japan

4 Glycoengineering

P1-14 Improved Terminal Galactosylation of Recombinant Antibody by Extracellular Glycosylation Reaction

Kota Sato[1], Hiroe Amou[2], Atsuko Shimazu[2], Masayoshi Onitsuka[3]
[1]Graduate Schools of Science and Technology for Innovation, Tokushima University,
[2]Manufacturing Technology Association of Biologics,
[3]Graduate School of Technology, Industry and Social Science, Tokushima University

5 Immunologicals, monoclonal antibodies, and vaccines

P1-15 Versatile tools for the detection of non-human glycoforms that are found in protein-containing pharmaceutical products and cell-derived materials for reproductive medicine

Fumie Kimura, Kento Kawamura, Takahiro Tanji, Takashi Ota, Jun Iwaki, Hideki Ishida, Noriyuki Yuasa, Yuji Matsuzaki
Tokyo chemical industry co. Ltd.

P1-16 Production of Influenza Virus-like Particles Using Recombinant Insect Cells

Takuya Matsuda, Toshikazu Tanijima, Akito Hirose, Kyoko Masumi-Koizumi, Tomohisa Katsuda, Hideki Yamaji
Kobe University

6 Transplantation, artificial organs, and organ substitutes

P1-17 Establishment of Human Hepatoma Cell Lines with Heat-Inducible High Liver Functions

Hiroyuki Kitano[1], Manuel Souvervielle[2], Yoshinori Kawabe[1], Masamichi Kamihira[1, 2]
[1]*Department of Chemical Engineering, Faculty of Engineering, Kyushu University,*
[2]*Graduate School of System Life Sciences, Kyushu University*

7 Tissue engineering and stem cells

P1-18 A Microcarrier Cell Culture Process Using Novel Serum-Free Medium, Complying with the Japanese Standards for Biological Ingredients

Kentaro Takagaki, Keiko Ban, Hisashi Saeki, Yoshifusa Sadamura
FUJIFILM Wako Pure Chemical Corporation

P1-19 Construction of a Skeletal Muscle Contraction Model Using Human iPS Cell-Derived Myoblasts

Keiichiro Sato[1], Kantaro Yoshioka[1], Taichi Yoshigai[1], Akira Ito[2], Yoshinori Kawabe[1], Masamichi Kamihira[1]
[1]*Department of chemical engineering, Faculty of engineering, Kyushu University ,*
[2]*Department of chemical engineering, Faculty of engineering, Nagoya university*

P1-20 Regulating Cell Fate of Human Amnion Epithelial Cells Using 3,4,5-Tri-O-Caffeoylquinic Acid (TCQA)

Meriem Bejaoui[1, 2], Farhana Ferdousi[1, 2], Yun-Wen Zheng[2, 3], Oda Tatsuya[2, 3], Hiroko Isoda[1, 2, 4]
[1]*Alliance for Research on the Mediterranean and North Africa (ARENA), University of Tsukuba, Tsukuba City, Japan,*
[2]*AIST-University of Tsukuba Open Innovation Laboratory for Food and Medicinal Resource Engineering (FoodMed-OIL), AIST, University of Tsukuba,*
[3]*Department of Gastrointestinal and Hepato-Biliary-Pancreatic Surgery, Faculty of Medicine, University of Tsukuba, Tsukuba City, Japan,*
[4]*Faculty of Life and Environmental Sciences, University of Tsukuba, Tsukuba City, Japan*

8 Gene therapy and cell therapy

P1-21 Gene therapy for APP/Psen Alzheimer Model Mice with PHP.eB ApoE2 Adeno-associated viral vector

Ryusei Fujimaki[1], Kouta Enomoto[1], Chu-Tong Shen[1], Shinobu Hirai[2], Haruo Okado[2], Minoru Saitoe[2], Tatsuhiro Hisatsne[1]
[1]*Tokyo University,* [2]*Tokyo Metropolitan Institute of Medical Science*

12 Functional substances in food and natural sources

P1-22 Aggravation of food allergy by skin sensitization via systemic Th2 enhancement

Risa Koshiba, Makoto Hattori, Tadashi Yoshida
Tokyo University of Agriculture and Technology, Japan

P1-23 Reduced immunogenicity of β-lactoglobulin by conjugation with carboxymethyl cellulose

Tatsuya Arai, Tadashi Yoshida, Makoto Hattori
Tokyo University of Agriculture and Technology, Japan

Poster Session 2 Day 4 Nov.20 (Fri)

9 Transgenic animals

Odd Numbers: 9:00-10:00
Even Numbers: 10:00-11:00

P2-01 Specific expression of eGFP in chicken primordial germ cells: New resource in“National BioResource Project (NBRP) chicken/quail”

Ken-ichi Nishijima, Yuya Okuzaki, Hidenori Kaneoka, Shinji Iijima, Yoichi Matsuda, Takayuki Suzuki
Nagoya Univ.

11 Cell regulatory factors and signal transduction

P2-02 Crosstalk of Post-translational Modifications Regulate Damaged DNA-binding Protein DDB2 Function

Hidenori Kaneoka[1], Kazuhiko Arakawa[1], Daiki Ogawa[1], Kota Sugimoto[1], Ken-ichi Nishijima[2], Shinji Iijima[3]
[1]*Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University,*
[2]*Laboratory of Avian Bioscience, Graduate School of Bioagricultural Sciences, Nagoya University,*
[3]*Department of Applied Chemistry, Faculty of Engineering, Aichi Institute of Technology*

P2-03 Protein kinase C β is involved in unsaturated carbonyl compounds-induced cell death in macrophages

Tsunehito Higashi, Yuichi Mazaki
Hokkaido Univ.

12 Functional substances in food and natural sources

P2-04 Black soybean seed coat polyphenols promote nitric oxide production in the vascular endothelial cells through the Akt/eNOS pathway

Ken-yu Hironao, Chiaki Domae, Hitoshi Ashida, Yoko Yamashita
Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan

P2-05 *Citrus* flavonoids inhibit the *in vitro* transport activity of human urate transporter 1 (URAT1/SLC22A12), a renal re-absorber of urate

Yu Toyoda[1], Tappei Takada[1], Hiroki Saito[1, 2], Hiroshi Hirata[2], Ami Ota-Kontani[2], Youichi Tsuchiya[2], Hiroshi Suzuki[1]
[1]*Department of Pharmacy, The University of Tokyo Hospital,*
[2]*Frontier Laboratories for Value Creation, SAPPORO HOLDINGS LTD.*

P2-06 Effects Of Docosahexaenoyl Ethanolamide, A Metabolite Of Docosahexaenoic Acid, On Allergic Responses

Yoshiki Kanayama[1], In-Hae Kim[1], Takuya Sugahara[1, 2], Kosuke Nishi[1, 2]
[1]*Dept. of Biosci., Grad. Sch. of Agric., Ehime Univ., Japan,* [2]*Food Health Sci. Res. Ctr., Ehime Univ., Japan*

P2-07 Enhancement Effects on Th1 Responses of NOD Mice Induced by Oral Administration of Koji Fungi

Hinari Uchida[1], Takashi Yoshizawa[1], Yoshinaru Uda[1], Rio Kitazume[1], Akihiro Sekiguchi[2], Atsushi Enomoto[1, 3]

[1]Department of Chemistry and Chemical Biology, Graduate School of Science and Engineering, Gunma University,

[2]Gunma Industrial Technology Center,

[3]Gunma University Center for Food Science and Wellness

P2-08 Anti-aging Effects of Dietary Restriction on the Murine Immune Systems

Ryo Tokudome[1], Reina Sekine[1], Saki Kakuta[1], Ryota Suda[1], Yuya Ogata[1], Atsushi Enomoto[1, 2]

[1]Department of Chemistry and Chemical Biology, Graduate School of Science and Engineering, Gunma University,

[2]Gunma University Center for Food Science and Wellness

P2-09 New Amphiphilic Squalene Derivative Improves Metabolism of Adipocytes Differentiated from Diabetic Adipose-Derived Stem Cells and Prevents Excessive Lipogenesis

Munkhzul Ganbold[1], Farhana Ferdousi[2], Takashi Arimura[1], Kenichi Tominaga[1], Hiroko Isoda[1, 2, 3]

[1]National Institute of Advanced Industrial Science and Technology (AIST)-University of Tsukuba Open Innovation Laboratory for Food and Medicinal Resource Engineering (FoodMed-OIL), AIST, University of Tsukuba, Japan,

[2]Alliance for Research on the Mediterranean and North Africa (ARENA), University of Tsukuba, Japan,

[3]Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

P2-10 Fisetin promotes hair growth by augmenting TERT expression

Mizuki Ogawa, Chisato Kubo, Norihisa Uehara, Yoshinori Katakura

Kyushu Univ.

P2-11 γ-Aminobutyric Acid (GABA) Induces Intestinal Cells to Secrete Exosomes that Activate the Neuronal Cells

Ryo Inostuka[1], Kanako Uchimura[1], Atsushi Yamatsu[2], Mujo Kim[2], Yoshinori Katakura[1]

[1]Kyushu Univ., [2]Pharma Foods International Co.,Ltd

P2-12 Enhancement of IL-12 Expression by Probiotics in Macrophage-like Cells

Tsukiho Hiura[1], Masahiko Suzuki[2], Kana Umetani[3], Mizuki Honda[1], Yuji Tsujikawa[2], Iwao Sakane[2], Hideo Satsu[3]

[1]Dept. of Biotech., Grad. Sch. of Eng., Maebashi Inst. Technol., Japan,

[2]Central Research Institute, ITO EN Ltd., Japan, [3]Dept. of Biotech., Maebashi Inst. Technol., Japan

P2-13 Search for Plant Bio-Active Compound that Promotes GLP-1 Secretion: Development of a New GLP-1 ELISA

Kevin Omondi Odongo, Ken-yu Hironao, Yoko Yamashita, Hitoshi Ashida

Kobe University

P2-14 Identification Of ZIP4 Protein Enhancing Compounds In Agricultural Food Resources And Development Of The Rapid Purification Method With A Solubility-Based Separation

Masakazu Takahashi[1], Haruna Yamauchi[1], Fuka Okawa[1], Masatoshi Sugimoto[2], Yoshito Kubo[2], Taiho Kambe[3], Hajime Katano[1]

[1]Fukui Prefectural University, [2]Fukui Food Processing Institute, [3]Kyoto University

P2-15 Effect of *Cirtrus unshiu* leaf water-extract on inflammation-induced mouse macrophage cell line RAW264.7 cells

Takako Ito[1], Kosuke Nishi[1, 2], Momoko Ishida[1], Ayumu Kadota[3], Takuya Sugahara[1, 2]

[1]Graduate School of Agriculture, Ehime University, Japan,

[2]Food and Health Sciences Research Center, Ehime University, Japan,

[3]Ikata Service Co., Ltd., Japan

P2-16 The effect of mung bean protein isolates peptides on antihyperglycemic functions

Qing Zhang[1], Yasukiyo Yoshioka[2], Yoko Yamashita[1], Hitoshi Ashida[1]

[1]Graduate School of Agricultural Science, Kobe University ,

[2]Department of Clinical Nutrition and Dietetics, Faculty of Clinical Nutrition and Dietetics, Konan Women's University

P2-17 The skin-protective effects of honeybush extracts

Kaho Shiraishi[1], Elizabeth Joubert[2], Christiaan Malberbe[2], Yutaka Miura[1]

[1]Tokyo University of Agriculture and Technology, Japan,

[2]Agricultural Research Council, South Africa

13 Animal cells for in vitro assay

P2-18 KAv-1 medium is more suitable for culture of chick fibroblasts than DMEM or medium

Masafumi Katayama[1, 2], Manabu Onuma[1, 2], Tomokazu Fukuda[2, 3]

[1]Center for Environmental Biology and Ecosystem Studies, National Institute for Environmental Studies,

[2]Wildlife Genome Collaborative Research Group, National Institute for Environmental Studies,

[3]Graduate School of Science and Engineering, Iwate University

P2-19 *Lactococcus lactis* subsp. *cremoris* YRC3780 Modulates the Balance of T Cell Differentiation Induced by Antigen Presentation of Mesenteric Lymph Node Dendritic Cells

Ryogo Nakagawa[1], Wenting Gu[1], Tomohiro Takano[1], Yimei Wang[1], Satoru Uno[1], Mamiko Morinaga[1], Kenji Uchida[2], Hidemasa Motoshima[2], Naoya Katano[2], Haruyo Nakajima Adachi[1], Satoshi Hachimura[1]

[1]Research Center for Food Safety, Univ. Tokyo, [2]Yotsuba Milk Products

P2-20 Effect of a covalent PPARγ agonist on inflammatory pathway

Yuma Omae[1], Hiroko Isoda[1, 2, 3], Yusaku Miyamae[1, 3]

[1]School of Integrative and Global Majors, University of Tsukuba, Japan,

[2]Alliance for Research on the Mediterranean and North Africa, University of Tsukuba, Japan,

[3]Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

14 Other topics concerning animal cell technology

P2-21 Small-molecule-binding peptide tags for imaging and manipulating proteins in living mammalian cells

Takehiro Ando[1], Yukio Takamori[1], Daisuke Horiuchi[1], Takumi Yokoyama[1], Mizuki Yamamoto[1], Takashi Kawakami[1, 2]

[1]*Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi,*
[2]*JST, PRESTO*

P2-22 Imaging and Manipulating Proteins in Living Mammalian Cells by Small-Molecule-Binding Peptide Tags

Mizuki Yamamoto[1], Takehiro Ando[2], Takumi Yokoyama[2], Daisuke Horiuchi[2], Yukio Takamori[2], Shinji Masui[3], Takashi Kawakami[3, 4]

[1]*Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, Japan,*
[2]*Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, Japan,*
[3]*Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, Japan,* [4]*JST, PRESTO, Japan*

12 Functional substances in food and natural sources

P2-23 Inhibition of allergic symptoms by drinking honeybush extracts and analysis of its mechanism

Ayumi Fukagawa[1], Elizabeth Joubert[2], Christiaan Malberbe[2], Makoto Hattori[1], Yutaka Miura[1], Tadashi Yoshida[1]

[1]*Tokyo University of Agriculture and Technology, Japan,*
[2]*Agricultural Research Council, South Africa*