

高度研究機器部門 利用論文リスト(~2024-8/5)

2020

Tachi, Masahiko; Yamaguchi, Naoko; Okada, Shoshiro;

Thromboxane A2 in the paraventricular hypothalamic nucleus mediates glucoprivation-induced adrenomedullary outflow

European Journal of Pharmacology, 2020, 875, 173034

利用機器：ACCELA HPLC system, LTQ Velos, 超純水製造装置 Milli-Q Direct

2021

Mao Hagihara, Tadashi Ariyoshi, Yasutoshi Kuroki, Shuhei Eguchi, Seiya Higashi, Takeshi Mori, Tsunemasa Nonogaki, Kenta Iwasaki, Makoto Yamashita, Nobuhiro Asai, Yusuke Koizumi, Kentaro Oka, Motomichi Takahashi, Yuka Yamagishi & Hiroshige Mikamo

Clostridium butyricum enhances colonization resistance against Clostridioides difficile by metabolic and immune modulation

Scientific Reports, 2021, 11, 1, 15007

利用機器：SpectraMax iD5, NanoDrop ONE, Fortessa X-20

Tadashi Ariyoshi,,Mao Hagihara,,Susumu Tomono,Shuhei Eguchi,Ayaka Minemura,Daiki Miura,Kentaro Oka,,Motomichi Takahashi, Yuka Yamagishi and Hiroshige Mikamo,*

Clostridium butyricum MIYAIRI 588 modifies bacterial composition under antibiotic-induced dysbiosis for the activation of interactions via lipid metabolism between the gut microbiome and the host

Biomedicines, 2021, 9, 8, 1065

利用機器：バイオアナライザー, SpectraMax iD5

Ogawa-Ochiai K, Ishikawa H, Li H, Vu Quang L, Kimoto I, Takamura M, Hongawa T, Hane Y, Suzuki S, Okajima M, Mori K, Ito M, Takami A.

Immunological and Preventive Effects of Hochuekkito and Kakkonto Against Coronavirus Disease in Healthcare Workers: A Retrospective Observational Study.

Front Pharmacol, 2021, 12, 766402

利用機器：Fortessa X-20

Karnan S, Hanamura I, Ota A, Takasugi S, Nakamura A, Takahashi M, Uchino K, Murakami S, Wahiduzzaman M, Quang Vu L, Rahman ML, Hasan MN, Hyodo T, Konishi H, Tsuzuki S, Yoshikawa K, Suzuki S, Ueda R, Ejiri M, Hosokawa Y, Takami A.

CD52 is a novel target for the treatment of FLT3-ITD-mutated myeloid leukemia.

Cell Death Discov., 2021, 7, 121

利用機器：Fortessa X-20, QuantStudio3, SpectraMAX M5, IX-73, BZ-X800, LAS-4000, DNA array scanner

Ichiro Hanamura, Susumu Suzuki, Akinobu Ota, Satsuki Murakami, Akira Satou, Taishi Takahara, Sivasundaram Karnan, Vu Quang Lam, Ayano Nakamura, Souichi Takasugi, Kazuhiro Yoshikawa, Shogo Banno, Masayuki Ejiri, Toyonori Tsuzuki, Yoshitaka Hosokawa, Ryuzo Ueda 3 and Akiyoshi Takami
The Clinical and Biological Effects of PD-1 Expression on Tumor Cells in Diffuse Large B-Cell Lymphoma
Hemato, 2021, 2, 368-382
利用機器：Amersham Imager 600, FACSCanto II, DNA microarray scanner, Spectramax M5, IX-73, BZ-9000

Yutaro Kondo, Susumu Suzuki, Taishi Takahara, Shoya Ono, Mitsuo Goto, Satoru Miyabe, Yoshihiko Sugita, Tetsuya Ogawa, Hideaki Ito, Akira Satou, Toyonori Tsuzuki, Kazuhiro Yoshikawa, Ryuzo Ueda, Toru Nagao
Improving function of cytotoxic T - lymphocytes by transforming growth factor - β inhibitor in oral squamous cell carcinoma
Cancer Science, 2021, 112, 4037-4049
利用機器：Amersham Imager 600, Fortessa X-20

Nakamura, Ayano Suzuki, Susumu; Kanasugi, Jo; Ejiri, Masayuki; Hanamura, Ichiro; Ueda, Ryuzo; Seto, Masao; Takami, Akiyoshi;
Synergistic effects of venetoclax and daratumumab on antibody-dependent cell-mediated natural killer cytotoxicity in multiple myeloma
International Journal of Molecular Sciences, 2021, 22, 10761
利用機器：Amersham Imager 600, Fortessa X-20

2022

Biswas, Mrityunjay; Yamazaki, Tatsuya; Tomono, Susumu; Karnan, Sivasundaram; Takagi, Hidekazu; Ichimonji, Isao; Inui, Masanori; Nagaoka, Fumiaki; Hosokawa, Yoshitaka; Akashi - Takamura, Sachiko;
Cell surface expression of human RP105 depends on N - glycosylation of MD - 1
FEBS letters, 2022, 596, 24, 3211-3231
利用機器：NanoDrop One, NanoDrop Lite Plus, Fortessa X-20, FACS Aria III, 3500 Genetic Analyzer, Amersham Imager 600

Morita, Naoko; Tanaka, Yukie; Takeuchi, Kenji; Kitagawa, Yoshinori; Sakuma, Ryusuke; Koide, Naoki; Komatsu, Takayuki;
SeV C Protein Plays a Role in Restricting Macrophage Phagocytosis by Limiting the Generation of Intracellular Double-Stranded RNA
Frontiers in Microbiology, 2022, 13, 780534
利用機器：Zeiss LSM710, FACS Canto II

Mao Hagihara, Makoto Yamashita, Tadashi Ariyoshi, Shuhei Eguchi, Ayaka Minemura, Daiki Miura, Seiya Higashi, Kentaro Oka, Tsunemasa Nonogaki, Takeshi Mori, Kenta Iwasaki, Jun Hirai, Yuichi Shibata, Takumi Umemura, Hideo Kato, Nobuhiro Asai, Yuka Yamagishi, Akinobu Ota, Motomichi Takahashi, Hiroshige Mikamo

Clostridium butyricum-induced ω -3 fatty acid 18-HEPE elicits anti-influenza virus pneumonia effects through interferon- λ upregulation

Cell Reports, 2022, 41, 11,

利用機器： SpectraMax iD5, NanoDrop ONE, Fortessa X-20

Yutaro Kondo, Susumu Suzuki, Shoya Ono, Mitsuo Goto, Satoru Miyabe, Tetsuya Ogawa, Hiromi Tsuchida, Hideaki Ito, Taishi Takahara, Akira Satou, Toyonori Tsuzuki, Kazuhiro Yoshikawa, Ryuzo Ueda, Toru Nagao
In situ PD-L1 expression in oral squamous cell carcinoma is induced by heterogeneous mechanisms among patients

International Journal of Molecular Sciences, 2022, 23, 4077

利用機器： Amersham Imager 600, Fortessa X-20

Sakuma K, Kii T, Takahashi H, Suzuki S, Yoshikawa K, Ogawa T, Tanaka A.

An In Vivo Study of Local Administration of Low-dose Anti-PD-1 Antibody Using an Oral Cancer Cell Line
Anticancer Research, 2022, 42, 4293-4303

利用機器： Fortessa X-20

Ono, Shoya Suzuki, Susumu; Kondo, Yutaro; Okubo, Ikuko; Goto, Mitsuo; Ogawa, Tetsuya; Kato, Hidefumi; Ito, Hideaki; Takahara, Taishi; Satou, Akira;

Trametinib improves Treg selectivity of anti-CCR4 antibody by regulating CCR4 expression in CTLs in oral squamous cell carcinoma

Scientific Reports, 2022, 12, 21678

利用機器： Amersham Imager 600, Fortessa X-20

Yamaguchi, Naoko; Kakinuma, Yoshihiko; Yakura, Tomiko; Naito, Munekazu; Okada, Shoshiro;

Glucose infusion suppresses acute restraint stress-induced peripheral and central sympathetic responses in rats
Autonomic Neuroscience, 2022, 239, 102957

利用機器： Zeiss LSM710, SpectraMax M5, ACCELA HPLC system, LTQ Velos, Milli-Q Direct

Ikegami, Keisuke; Masubuchi, Satoru;

Suppression of trabecular meshwork phagocytosis by norepinephrine is associated with nocturnal increase in intraocular pressure in mice

Communications Biology, 2022, 5, 1, 339

利用機器： BZ-X800, クライオミクロトーム ポーラーD, IncuCyte, IncuCyte ZOOM, NanoDrop Lite Plus, SpectraMax M5, SpectraMax ABSPlus, FAS-V, ImageQuant LAS 500, StepOnePlus, QuantStudio 3

Masubuchi, Satoru; Yano, Takako; Komatsu, Kouji; Ikegami, Keisuke; Nakamura, Wataru; Ota, Akinobu; Karnan, Sivasundaram; Takeuchi, Kosei; Hosokawa, Yoshitaka; Todo, Takeshi;

A mouse model of insomnia with sleep apnea

bioRxiv, 2022, 2022.08. 16.503987

利用機器：QuantStudio 3, Milli-Q Direct, Nexera-X2 システム, DNA マイクロアレイ実験用機器 ・ハイブリダイゼーション オープン, チャンバ, Qubit4

Chihiro, Ito; Takuya, Matsui; Kimiko, Miyabe; Choudhury M Hasan; Mohammad A Rashid; Masataka, Itoigawa

Four new isoflavones from *Derris scandens* and their in vitro antiproliferative effects.

Natural product research, 2022, 36, 6, 1448-1453

利用機器：incucyte ZOOM, SpectraMax M5

Takuya Matsui, Chihiro Ito, Masataka Itoigawa, Toshiyuki Shibata

Three phlorotannins from *Sargassum carpophyllum* are effective against the secretion of allergic mediators from antigen-stimulated rat basophilic leukemia cells.

Food Chemistry, 2022, 377,

利用機器：SpectraMax M5, SimpliAmp, Fortessa X-20, Amersham Imager 600, QuantStudio 3, SCIEX TripleQuad5500+

2023

Kunoki S, Tatsukawa H, Sakai Y, Kinashi H, Kariya T, Suzuki Y, Mizuno M, Yamaguchi M, Sasakura H, Ikeno M, Takeuchi K, Ishimoto T, Hitomi K, Ito Y.

Inhibition of Transglutaminase 2 Reduces Peritoneal Injury in a Chlorhexidine-Induced Peritoneal Fibrosis Model.

Laboratory Investigation. 2023 103(4) April 2023, 100050

利用機器：QuantStudio3

Kunou M, Yamaguchi M, Takahashi H, Kimura Y, Watanabe N, Ito M, Sugiyama H, Iwagaitsu S, Nobata H, Kinashi H, Katsuno T, Banno S, Ito Y, Ishimoto T.

A case of 2,8-DHA crystalline nephropathy caused by adenine phosphoribosyltransferase deficiency: diagnosis and treatment

CEN Case Rep 2023 12, 329-334

利用機器：透過型電子顕微鏡(TEM)

Chowdhury, Sajid Iftekhar; Inui, Masanori; Yamazaki, Tatsuya; Tomono, Susumu; Takagi, Hidekazu; Biswas, Mrityunjay; Saitoh, Shin - Ichiroh; Miyake, Kensuke; Akashi - Takamura, Sachiko;
The anti - TLR4 monoclonal antibody Sa15 - 21 enhances inflammatory cytokine production in LPS - stimulated macrophages

FEBS letters, 2023, 597, 9, 1246-1260

利用機器：NanoDrop One, Amersham Imager 600, Fortessa X-20

Narita, Akiko; Nakano, Yuta; Okada, Hiroaki; Yamamoto, Takahiro; Matsunaga, Nozomu; Ikeda, Shuji; Izumi, Yuichiro; Kitagawa, Akira; Ota, Toyohiro; Suzuki, Kojiro;

In Vitro Characterization of Drug-Loaded Superabsorbent Polymer Microspheres: Absorption and Release Capacity of Contrast Material, Antibiotics and Analgesics

CardioVascular and Interventional Radiology, 2023, 46, 11, 1632-1640

利用機器：Nexera-X2 システム

Karnan S, Ota A, Murakami H, Rahman ML, Wahiduzzaman M, Hasan MN, Vu LQ, Hanamura I, Inoko A, Riku M, Ito H, Kaneko Y, Hyodo T, Konishi H, Tsuzuki S, Hosokawa Y.

CAMK2D: a novel molecular target for BAP1-deficient malignant mesothelioma.

Cell Death Discov. 2023 Jul 21;9(1):257.

利用機器：Fortessa X-20, FACSARIAIII, 3500 Genetic Analyzer, SpectraMax M5, NanoDrop One, 倒立顕微鏡 IX-73, DNA マイクロアレイスキャナ, Amersham Imager 600, StepOnePlus,

Onda M, Ota A, Ito K, Ono T, Karnan S, Kato M, Kondo S, Furuhashi A, Hayashi T, Hosokawa Y, Kazaoka Y. Inhibition of VEGFR2 and EGFR signaling cooperatively suppresses the proliferation of oral squamous cell carcinoma.

Cancer Med. 2023 Aug;12(15):16416-16430.

利用機器：Fortessa X-20, SpectraMax M5, NanoDrop One, DNA マイクロアレイスキャナ, 倒立顕微鏡 IX-73, Amersham Imager 600, 3500 Genetic Analyzer, StepOnePlus

Hasan MN, Hyodo T, Biswas M, Rahman ML, Mihara Y, Karnan S, Ota A, Tsuzuki S, Hosokawa Y, Konishi H. Flow cytometry-based quantification of genome editing efficiency in human cell lines using the L1CAM gene. PLoS One. 2023 Nov 9;18(11):e0294146.

利用機器：Fortessa X-20, FACSARIAIII, 3500 Genetic Analyzer, SpectraMax M5, NanoDrop One.

Shunpei Yamanaka, Susumu Suzuki, Hideaki Ito, Karnan Sivasundaram, Ichiro Hanamura, Ikuko Okubo, Kazuhiro Yoshikawa, Shoya Ono, Taishi Takahara, Akira Satou, Toyonori Tsuzuki, Ryuzo Ueda, Tetsuya Ogawa, Yasushi Fujimoto

Establishment of Mucoepidermoid Carcinoma Cell Lines from Surgical and Recurrence Biopsy Specimens International Journal of Molecular Sciences, 2023, 24, 1722

利用機器：Amersham Imager 600, Fortessa X-20, ABI Prism 377 Genetic Analyzer

Nakamura H, Ogawa T, Yamanaka S, Inukai D, Maruo T, Takahara T, Satou A, Tsuzuki T, Suzuki S, Ueda R, Fujimoto Y.

Immune Status of Cervical Lymph Nodes in Head and Neck Cancer-A Surgical Oncology Perspective

Journal of personalized medicine, 2023, 13, 1174

利用機器：Fortessa X-20

Okamoto H, Yoshikawa K, Shimada A, Sano R, Inukai D, Yamanaka S, Suzuki S, Ueda R, Ueda H, Fujimoto Y, Ogawa T.

Artesunate and cisplatin synergistically inhibit HNSCC cell growth and promote apoptosis with artesunate-induced decreases in Rb and phosphorylated Rb levels.

Oncology reports, 2023, 50, 154

利用機器：Amersham Imager 600, Fortessa X-20, ABI Prism 377 DNA Sequencer

Matsushita N, Kato S, Nishizawa K, Sugawara M, Takeuchi K, Miyasaka Y, Mashimo T, and Kobayashi K.

Protocol for highly selective transgene expression through the flip-excision switch system by using a unilateral spacer sequence.

STAR Protocols 2023, 4(4):102667.

利用機器：3500 Genetic Analyzer

Matsushita N, Kato S, Nishizawa K, Sugawara M, Takeuchi K, Miyasaka Y, Mashimo T, and Kobayashi K.

Highly selective transgene expression through the flip-excision switch system by using a unilateral spacer sequence.

Cell Reports Methods 2023, 3:100393.

利用機器：3500 Genetic Analyzer

Yamaguchi, Naoko; Maruyama, Kenta; Okada, Shoshiro;

Yokukansan, a Traditional Japanese Medicine, Suppresses Stress-Induced Sympathetic Activation via Central Responses in Rats

Natural Product Communications, 2023, 18, 11, 1934578X231203085

利用機器：ACCELA HPLC system ; LTQ Velos ; 超純水製造装置 Milli-Q Direct

Nakamura R*, Tohnai G*, Nakatochi M*, Atsuta N, Watanabe H, Ito D, Katsuno M, Hirakawa A, Izumi Y, Morita M, Hirayama T, Kano O, Kanai K, Hattori N, Taniguchi A, Suzuki N, Aoki M, Iwata I, Yabe I, Shibuya K, Kuwabara S, Oda M, Hashimoto R, Aiba I, Ishihara T, Onodera O, Yamashita T, Abe K, Mizoguchi K, Shimizu T, Ikeda Y, Yokota T, Hasegawa K, Tanaka F, Nakashima K, Kaji R, Niwa J, Doyu M, Terao C, Ikegawa S, Fujimori K, Nakamura S, Ozawa F, Morimoto S, Onodera K, Ito T, Okada Y, Okano H, Sobue G, JaCALS study group

Genetic factors affecting survival in Japanese patients with sporadic amyotrophic lateral sclerosis: a genome-wide association study and verification in iPSC-derived motor neurons from patients

J Neurol Neurosurg Psychiatry. jnnp-2022-330851. 2023 doi: 10.1136/jnnp-2022-330851.

利用機器：IN Cell Analyzer 6000, フロア型超遠心機 XE-90, SpectraMax ABSPlus

Rashid MI, Ito T, Miya F, Shimojo D, Arimoto K, Onodera K, Okada R, Nagashima T, Yamamoto K, Khatun Z, Shimul RI, Niwa J, Katsuno M, Sobue G, Okano H, Sakurai H, Shimizu K, Doyu M, Okada Y*

Simple and efficient differentiation of human iPSCs into contractible skeletal muscles for muscular disease modeling

Sci Rep. 13 (1) 8146. 2023 doi: 10.1038/s41598-023-34445-9

利用機器：3500 Genetic Analyzer

Oiwa K, Watanabe S, Onodera K, Iguchi Y, Kinoshita Y, Komine O, Sobue A, Okada Y, Katsuno M, Yamanaka K.

Monomerization of TDP-43 is a key determinant for inducing TDP-43 pathology in amyotrophic lateral sclerosis

Sci Adv. 9 (31): eadf6895. 2023 doi: 10.1126/sciadv.adf6895.

利用機器：IN Cell Analyzer 6000, フロア型超遠心機 XE-90,

2024

Takashi Kobayashi, Akihiro Yamashita, Noriyuki Tsumaki, Hideto Watanabe

Subpopulations of fibroblasts derived from human iPS cells

Communications Biology, 2024, 7, 736.

利用機器：QuantStudio 3, Novocyte Flow Cytometer

Tatsumasa Shioiri, Jun Tsuchimoto, Kaori Fukushima, Takao Takeuchi, Munekazu Naito, Hideto Watanabe, Nobuo Sugiura

Chondroitin sulfate-liposome: clustering toward high functional efficiency

The Journal of Biochemistry, 2024 Jun 11, mvae041, doi.org/10.1093/jb/mvae041

利用機器：Novocyte Flow Cytometer

Hagihara, Mao; Kato, Hideo; Yamashita, Makoto; Shibata, Yuichi; Umemura, Takumi; Mori, Takeshi; Hirai, Jun; Asai, Nobuhiro; Mori, Nobuaki; Mikamo, Hiroshige;
Lung cancer progression alters lung and gut microbiomes and lipid metabolism
Heliyon, 2024, 10, 1,
利用機器：SpectraMax iD5, NanoDrop ONE

Hagihara M, Ariyoshi T, Eguchi S, Oka K, Takahashi M, Kato H, Shibata Y, Umemura T, Mori T, Miyazaki N, Hirai J, Asai N, Mori N, Mikamo H.
Oral Clostridium butyricum on mice endometritis through uterine microbiome and metabolic alternations.
Frontiers in Microbiology, 2024, 15, 1351899
利用機器：SpectraMax iD5, NanoDrop ONE

Karnan S, Hanamura I, Ota A, Vu LQ, Uchino K, Horio T, Murakami S, Mizuno S, Rahman ML, Wahiduzzaman M, Hasan MN, Biswas M, Hyodo T, Ito H, Suzuki A, Konishi H, Tsuzuki S, Hosokawa Y, Takami A.
ARK5 enhances cell survival associated with mitochondrial morphological dynamics from fusion to fission in human multiple myeloma cells.
Cell Death Discov. 2024 Jan 29;10(1):56.
利用機器：Fortessa X-20, FACSARIAIII, Genetic Analyzer3500, SpectraMax M5, NanoDrop One. OLYMPUS FV3000, DNA マイクロアレイスキャナ, 倒立顕微鏡 IX-73, Amersham Imager 600, StepOnePlus,

Kato M, Ota A, Ono T, Karnan S, Hyodo T, Rahman ML, Hasan MN, Onda M, Kondo S, Ito K, Furuhashi A, Hayashi T, Konishi H, Tsuzuki S, Hosokawa Y, Kazaoka Y.
PDZ-binding kinase inhibitor OTS514 suppresses the proliferation of oral squamous carcinoma cells.
Oral Dis. 2024 Mar;30(2):223-234.
利用機器：Fortessa X-20, SpectraMax M5, NanoDrop One, 倒立顕微鏡 IX-73, Amersham Imager 600, 3500 Genetic Analyzer, StepOnePlus, DNA マイクロアレイスキャナ

Hyodo T, Asano-Inami E, Ito S, Sugiyama M, Nawa A, Rahman ML, Hasan MN, Mihara Y, Lam VQ, Karnan S, Ota A, Tsuzuki S, Hamaguchi M, Hosokawa Y, Konishi H.
Leucine zipper protein 1 (LUZP1) regulates the constriction velocity of the contractile ring during cytokinesis.
FEBS J. 2024 Mar;291(5):927-944.
利用機器：FV3000, BZ-9000, Amersham Imager 600, 3500 Genetic Analyzer, NanoDrop One.

Zhou X, Iida H, Li Y, Ota A, Zhuo L, Nobuhara R, Terajima Y, Naiki M, Reddi AH, Kimata K, Ushida T.
7.Neurotrophin® ameliorates chronic pain associated with scar formation in a mouse model: A gene expression analysis of the inflammatory response.
Mol Pain. 2024 Mar 21:17448069241245420.
利用機器：StepOnePlus, SpectraMax M5, DNA マイクロアレイスキャナ Agilent G2565BA, バイオアナライザー Agilent Technologies Agilent 2100

犬飼洋子

最先端医療の今—生理的味覚（辛味）性発汗の機序の解明：中枢から末梢まで. Elucidation of the mechanisms of physiological gustatory (pungency-related) sweating: the central to the peripheral system. Medical Science Digest 2024 Jan ; 50(1) : 52-55.

利用機器：人工気候室

犬飼洋子 Inukai Y.

体温調節の病態—高体温，低体温—. The pathology of thermoregulation: hyperthermia and hypothermia. 自律神経 2024 Jun ; 61(2) : 152-157.

利用機器：人工気候室

Suzuki S, Tsuzuki T, Saito M, Ishii T, Takahara T, Satou A, Inukai D, Yamanaka S, Yoshikawa K, Ueda R, Ogawa T.

Regulatory T-cells activated in metastatic draining lymph nodes possibly suppress cancer immunity in cancer tissues of head and neck squamous cell cancer.

Pathology international, 2024, 74, 327-336

利用機器：Fortessa X-20

Yamamura A, Fujiwara M, Kawade A, Amano T, Hossain A, Nayeem MJ, Kondo R, Suzuki Y, Inoue Y, Hayashi H, Suzuki S, Sato M, Yamamura H.

Corosolic acid attenuates platelet-derived growth factor signaling in macrophages and smooth muscle cells of pulmonary arterial hypertension

Eur J Pharmacol., 2024, 973, 176564

利用機器：共焦点レーザー顕微鏡 FV3000, Amersham Imager 600, SpectraMax M3

Taku Fukushima, Yuka Hasegawa, Sachi Kuse, Taiju Fujioka, Takeshi Nikawa, Satoru Masubuchi, Iori Sakakibara

PHF2 regulates sarcomeric gene transcription in myogenesis

PLOS ONE, 2024 May, 19(5): e0301690

利用機器：StepOnePlus, BZ-X800