

Hyodo T, Rahman ML, Karnan S, Ito T, Toyoda A, Ota A, Wahiduzzaman M, Tsuzuki S, Okada Y, Hosokawa Y, Konishi H

Tandem Paired Nicking Promotes Precise Genome Editing with Scarce Interference by p53.

Cell Reports, 01 Jan 2020, 30(4):1195-1207.e7

主な使用機器 : StepOnePlus, FACScantoll, FACSAriaIII, BZ9000,

Mao Hagihara, Yasutoshi Kuroki, Tadashi Ariyoshi, Seiya Higashi, Kazuo Fukuda, Rieko Yamashita, Asami Matsumoto, Takeshi Mori, Kaoru Mimura, Naoko Yamaguchi, Shoshiro Okada, Tsunemasa Nonogaki, Tadashi Ogawa, Kenta Iwasaki, Susumu Tomono, Nobuhiro Asai, Yusuke Koizumi, Kentaro Oka, Yuka Yamagishi, Motomichi Takahashi, Hiroshige Mikamo

Clostridium butyricum Modulates the Microbiome to Protect Intestinal Barrier Function in Mice with Antibiotic-Induced Dysbiosis

iScience. 2020 Jan 24;23(1):100772. doi: 10.1016/j.isci.2019.100772. Epub 2019 Dec 13.

主な使用機器 : FACScantoll, LTQ-Velos, Triple TOF 5600

Emiri Miura-Yura, Shin Tsunekawa, Keiko Naruse, Nobuhisa Nakamura, Mikio Motegi, Hiromi Nakai-Shimoda, Saeko Asano, Makoto Kato, Yuichiro Yamada, Takako Izumoto-Akita, Akihito Yamamoto, Tatsuhito Himeno, Masaki Kondo, Yoshiro Kato, Jiro Nakamura, Hideki Kamiya

Secreted factors from cultured dental pulp stem cells promoted neurite outgrowth of dorsal root ganglion neurons and ameliorated neural functions in streptozotocin-induced diabetic mice

J Diabetes Investig. 2020 Jan;11(1):28-38. doi: 10.1111/jdi.13085. Epub 2019 Jun 21.

主な使用機器 : BX51, SpectraMax

Masae Iwai, Fumio Kondo, Takayoshi Suzuki, Tadashi Ogawa, Hiroshi Seno

Application of Lithium Assay kit LS for quantification of lithium in whole blood

and urine.

Legal medicine (Tokyo, Japan) 49 101834 - 101834 Mar, 2021

主な使用機器 : Triple TOF 5600

Hideaki Ito, Takumi Tsunoda, Miho Riku, Shingo Inaguma, Akihito Inoko, Hideki Murakami, Hiroshi Ikeda, Michiyuki Matsuda, Kenji Kasai

Indispensable role of STIL in the regulation of cancer cell motility through the lamellipodial accumulation of ARHGEF7-PAK1 complex

Oncogene. 2020 Feb;39(9):1931-1943. doi: 10.1038/s41388-019-1115-9. Epub 2019 Nov 21.

主な使用機器 : StepOnePlus, FACSAriaIII, LAS4000, IX73, Incucyte

Inaguma S, Lasota J, Czapiewski P, Langfort R, Rys J, Szpor J, Waloszczyk P, Okoń K, Biernat W, Schrump DS, Hassan R, Kasai K, Miettinen M, Ikeda H

CD70 expression correlates with a worse prognosis in malignant pleural mesothelioma patients via immune evasion and enhanced invasiveness

J Pathol. 2020 Feb;250(2):205-216.

主な使用機器 : FACScantoII, LAS4000,

Kazunari Onodera, Daisuke Shimojo, Yasuharu Ishihara, Masato Yano, Fuyuki Miya, Haruhiko Banno, Naoko Kuzumaki, Takuji Ito, Rina Okada, Bruno de Araújo Herculano, Manabu Ohshima, Mari Yoshida, Tatsuhiko Tsunoda, Masahisa Katsuno, Manabu Doyu, Gen Sobue, Hideyuki Okano, Yohei Okada

Unveiling synapse pathology in spinal bulbar muscular atrophy by genome-wide transcriptome analysis of purified motor neurons derived from disease specific iPSCs

Mol Brain. 2020 Feb 19;13(1):18.

主な使用機器 : StepOnePlus, QuantStudio3, FACSAriaIII, BZ9000

Satoshi Inoue, Takumi Tsunoda, Miho Riku, Hideaki Ito, Akihito Inoko, Hideki Murakami, Masahide Ebi, Naotaka Ogasawara, Ira Pastan, Kunio Kasugai, Kenji

Kasai, Hiroshi Ikeda, Shingo Inaguma

Diffuse mesothelin expression leads to worse prognosis through enhanced cellular proliferation in colorectal cancer

Oncol Lett. 2020 Mar;19(3):1741-1750.

主な使用機器：LAS4000

Sayuri Kondo, Akinobu Ota, Takayuki Ono, Sivasundaram Karnan, Md Wahiduzzaman, Toshinori Hyodo, Md Lutfur Rahman, Kunihiro Ito, Akifumi Furuhashi, Tomio Hayashi, Hiroyuki Konishi, Shinobu Tsuzuki, Yoshitaka Hosokawa, Yoshiaki Kazaoka

Discovery of novel molecular characteristics and cellular biological properties in ameloblastoma

Cancer Med. 2020 Apr;9(8):2904-2917.

主な使用機器：StepOnePlus, LAS4000, SptectraMax, DNA microarray Scanner, ABI3500

Kouji Komatsu, Satoru Masubuchi

Increased supply from blood vessels promotes the activation of dormant primordial follicles in mouse ovaries

J Reprod Dev. 2020 Apr 10;66(2):105-113.

主な使用機器：KSM710

Hishida K, Hatano S, Furukawa H, Yokoo K, Watanabe H

Effects of Fibroblast Growth Factor on Burn Injury and Repair Process: Analysis Using a Refined Mouse Model.

Plast Reconstr Surg Glob Open. 2020 Apr 10;8(4):e2757.

主な使用機器：BZ9000

Jo Kanasugi, Ichiro Hanamura, Akinobu Ota, Sivasundaram Karnan, Vu Quang Lam, Shohei Mizuno, Md Wahiduzzaman, Md Lutfur Rahman, Toshinori Hyodo, Hiroyuki Konishi, Shinobu Tsuzuki, Yoshitaka Hosokawa, Akiyoshi Takami

Biallelic loss of FAM46C triggers tumor growth with concomitant activation of Akt signaling in multiple myeloma cells

Cancer Sci. 2020 May;111(5):1663-1675.

主な使用機器：FACScantoll, Amersham Imageanalyzer 600, SptectraMax, DNA microarray Scanner,

Masahiko Tachi, Naoko Yamaguchi, Shoshiro Okada

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

Eur J Pharmacol. 2020 May 15;875:173034.

主な使用機器：LTQ-velos

Akihiro Maenaka, Iwasaki Kenta, Akinobu Ota, Yuko Miwa, Wataru Ohashi, Kosei Horimi, Yutaka Matsuoka, Masafumi Ohnishi, Kazuharu Uchida, Takaaki Kobayashi
Interferon- γ -induced HLA Class II expression on endothelial cells is decreased by inhibition of mTOR and HMG-CoA reductase

FEBS Open Bio. 2020 May;10(5):927-936.

主な使用機器：FACScantoll, Amersham Imageanalyzer 600, InCellAnalyzer

Shamima Islam, Kantinan Chuensirikulchai, Saichit Khummuang, Tanyaporn Keratibumrungpong, Prachya Kongtawelert, Watchara Kasinrerak, Sonoko Hatano, Akiko Nagamachi, Hiroaki Honda, Hideto Watanabe

Accumulation of versican facilitates wound healing: Implication of its initial ADAMTS-cleavage site

Matrix Biol. 2020 May;87:77-93.

主な使用機器：LAS4000, BZ9000

Akina Nakashima, Susumu Tomono, Tatsuya Yamazaki, Masanori Inui, Naoko Morita, Isao Ichimonji, Hidekazu Takagi, Fumiaki Nagaoka, Misako Matsumoto, Yasuhiko Ito, Takeshi Yanagishita, Kensuke Miyake, Daisuke Watanabe, Sachiko Akashi-Takamura

Phospholipase A2 from bee venom increases poly(I:C)-induced activation in human keratinocytes

Int Immunol. 2020 May 30;32(6):371-383.

主な使用機器 : StepOnePlus, FACScantoll, LAS4000, KSM710, LTQ-velos

Susumu Suzuki, Tetsuya Ogawa, Rui Sano, Taishi Takahara, Daisuke Inukai, Satou Akira, Hiromi Tsuchida, Kazuhiro Yoshikawa, Ryuzo Ueda, and Toyonori Tsuzuki
corresponding author

Immune - checkpoint molecules on regulatory T - cells as a potential therapeutic target in head and neck squamous cell cancers

Cancer Sci. 2020 Jun;111(6):1943-1957.

主な使用機器 : BD Fortessa, FACScantoll,

Kaori Fukushige, Tatsuaki Tagami, Munekazu Naito, Eiichi Goto, Shuichi Hirai, Naoyuki Hatayama, Hiroki Yokota, Takao Yasui, Yoshinobu Baba, Tetsuya Ozeki
Developing spray-freeze-dried particles containing a hyaluronic acid-coated liposome-protamine-DNA complex for pulmonary inhalation

Int J Pharm. 2020 Jun 15;583:119338.

主な使用機器 : StepOnePlus, FACScantoll, Amersham Imageanalyzer 600

Koji Osuka, Yasuo Watanabe, Nobuteru Usuda, Kenichiro Iwami, Shigeru Miyachi, Masakazu Takayasu

Expression of high mobility group B1 and toll-like receptor-nuclear factor κ B signaling pathway in chronic subdural hematomas

PLoS One. 2020 Jun 1;15(6):e0233643.

主な使用機器 : LAS4000, SpectraMax

Akinobu Ota, Ichiro Hanamura, Sivasundaram Karnan, Shingo Inaguma, Norio Takei, Vu Quang Lam, Shohei Mizuno, Jo Kanasugi, Md Wahiduzzaman, Md Lutfur Rahman, Toshinori Hyodo, Hiroyuki Konishi, Shinobu Tsuzuki, Hiroshi Ikeda, Akiyoshi Takami, Yoshitaka Hosokawa

Novel Interleukin- Inducible Gene PDZ-Binding Kinase Promotes Tumor Growth of Multiple Myeloma Cells

J Interferon Cytokine Res. 2020 Aug;40(8):389-405.

主な使用機器 : StepOnePlus, FACScantoll, LAS4000, SpectraMax, DNA microarray Scanner

Shinobu Tsuzuki, Takahiko Yasuda, Shinya Kojima, Masahito Kawazu, Koshi Akahane, Takeshi Inukai, Masue Imaizumi, Takanobu Morishita, Koichi Miyamura, Toshihide Ueno, Sivasundaram Karnan, Akinobu Ota, Toshinori Hyodo, Hiroyuki Konishi, Masashi Sanada, Hirokazu Nagai, Keizo Horibe, Akihiro Tomita, Kyogo Suzuki, Hideki Muramatsu, Yoshiyuki Takahashi, Yasushi Miyazaki, Itaru Matsumura, Hitoshi Kiyoi, Yoshitaka Hosokawa, Hiroyuki Mano and Fumihiko Hayakawa

Targeting MEF2D-fusion Oncogenic Transcriptional Circuitries in B-cell Precursor Acute Lymphoblastic Leukemia

Blood Cancer Discovery July(1) 82 - 95

主な使用機器 : FACSCantoll, Amersham Imager 600

Yusuke Ohmichi, Mika Ohmichi, Ryoichi Tashima, Koji Osuka, Kaori Fukushige, Dominika Kanikowska, Yugo Fukazawa, Hiromu Yawo, Makoto Tsuda, Munekazu Naito, Takashi Nakano

Physical disuse contributes to widespread chronic mechanical hyperalgesia, tactile allodynia, and cold allodynia through neurogenic inflammation and spino-parabrachio-amygdaloid pathway activation

Pain. 2020 Aug;161(8):1808-1823.

主な使用機器 : StepOnePlus, Leica cryostat

Daisuke Inukai, Kunihiro Nishimura, Hiroki Okamoto, Rui Sano, Hiromi Ueda, Akinobu Ota, Sivasundaram Karnan, Yoshitaka Hosokawa, Kazuhiro Yoshikawa, Susumu Suzuki, Ryuzo Ueda, Kenta Murotani, Carol R Bradford, Tetsuya Ogawa
Identification of cisplatin-resistant factor by integration of transcriptomic and

proteomic data using head and neck carcinoma cell lines

Nagoya J Med Sci. 2020 Aug;82(3):519-531.

主な使用機器：LAS-4000

Abdullah Al Mamun, Hisaki Hayashi, Aya Yamamura, Md Junayed Nayeem,
Motohiko Sato

Hypoxia induces the translocation of glucose transporter to the plasma
membrane in vascular endothelial cells

J Physiol Sci. 2020 Sep 22;70(1):44.

主な使用機器：BD Fortessa, LAS-4000, LSM710, SpectraMax

Naoko Morita, Yukie Tanaka, Erdenezaya Odkhuu, Yoshikazu Naiki, Takayuki
Komatsu, Naoki Koide

Sendai virus V protein decreases nitric oxide production by inhibiting RIG-I
signaling in infected RAW264.7 macrophages

Microbes Infect. 2020 Sep;22(8):322-330.

主な使用機器：LAS-4000

Tadashi Ariyoshi, Mao Hagihara, Shuhei Eguchi, Aiki Fukuda, Kenta Iwasaki,
Kentaro Oka, Motomichi Takahashi, Yuka Yamagishi, Hiroshige Mikamo

Clostridium butyricum MIYAIRI 588-Induced Protectin D1 Has an Anti-
inflammatory Effect on Antibiotic-Induced Intestinal Disorder

Front Microbiol. 2020 Oct 30;11:587725

主な使用機器：FACSCantoll

Makoto Kato, Shin Tsunekawa, Nobuhisa Nakamura, Emiri Miura-Yura, Yuichiro
Yamada, Yusuke Hayashi, Hiromi Nakai-Shimoda, Saeko Asano, Tomohide Hayami,
Mikio Motegi, Emi Asano-Hayami, Sachiko Sasajima, Yoshiaki Morishita, Tatsuhito
Himeno, Masaki Kondo, Yoshiro Kato, Takako Izumoto-Akita, Akihito Yamamoto,
Keiko Naruse, Jiro Nakamura, Hideki Kamiya

Secreted Factors from Stem Cells of Human Exfoliated Deciduous Teeth Directly

Activate Endothelial Cells to Promote All Processes of Angiogenesis
Cells. 2020 Oct 31;9(11):2385.

主な使用機器：BX51, SpectraMax

Mikio Motegi, Tatsuhito Himeno, Hiromi Nakai-Shimoda, Rieko Inoue, Norio Ozeki, Yusuke Hayashi, Sachiko Sasajima, Mohammad Sarif Mohiuddin, Emi Asano-Hayami, Makoto Kato, Saeko Asano, Emiri Miura-Yura, Yoshiaki Morishita, Masaki Kondo, Shin Tsunekawa, Yoshiro Kato, Koichi Kato, Keiko Naruse, Yusuke Seino, Yoshitaka Hayashi, Jiro Nakamura, Hideki Kamiya

Deficiency of glucagon gene-derived peptides induces peripheral polyneuropathy in mice

BBRC. 2020 Oct 29;532(1):47-53.

主な使用機器：LSM710, IX73, JEM-1400

Sivasundaram Karnan, Akinobu Ota, Hideki Murakami, Md Lutfur Rahman, Muhammad Nazmul Hasan, Md Wahiduzzaman, Ichiro Hanamura, Lam Quang Vu, Akihito Inoko, Toshinori Hyodo, Hiroyuki Konishi, Shinobu Tsuzuki, Yoshitaka Hosokawa

Identification of CD24 as a potential diagnostic and therapeutic target for malignant pleural mesothelioma

Cell Death Discov. 2020 Nov 18;6(1):127.

主な使用機器：StepOnePlus, LAS-4000, BZ-9000, DNA microarray Scanner

K Iwasaki, H Hamana, H Kishi, T Yamamoto, T Hiramitsu, M Okad, T Tomosugi, A Takeda, S Narumi, Y Watarai, Y Miwa, M Okumura, Y Matsuoka, K Horimi, A Muraguchi, T Kobayash

The suppressive effect on CD4 T cell alloresponse against endothelial HLA-DR via PD-L1 induced by anti-A/B ligation

Clin Exp Immunol. 2020 Nov;202(2):249-261.

主な使用機器：FACSCantoll, FACSAriaIII

Chiharu Suzuki, Naoyuki Hatayama, Tadashi Ogawa, Eri Nanizawa, Shun Otsuka, Koichiro Hata, Hiroshi Seno, Munekazu Naito, Shuichi Hirai
Cardioprotection via Metabolism for Rat Heart Preservation Using the High-Pressure Gaseous Mixture of Carbon Monoxide and Oxygen
Int J Mol Sci. 2020 Nov 23;21(22):8858.
主な使用機器：SpectraMax

Yusuke Ohmichi, Mika Ohmichi, Munekazu Naito
The superoxide scavenger tempol attenuates DNA oxidative injury and spontaneous pain-like behavior in chronic post-cast pain model rats
BBRC. 2020 Dec 17;533(4):745-750.
主な使用機器：Leica cryostat

Tatsuya Yamazaki, Mrityunjoy Biswas, Kouyu Kosugi, Maria Nagashima, Masanori Inui, Susumu Tomono, Hidekazu Takagi, Isao Ichimonji, Fumiaki Nagaoka, Akira Aina, Hideki Hasegawa, Joe Chiba, Sachiko Akashi-Takamura
A Novel Gene Delivery Vector of Agonistic Anti-Radioprotective05 Expressed on Cell Membranes Shows Adjuvant Effect for DNA Immunization Against Influenza
Front Immunol. 2020 Dec 22;11:606518.
主な使用機器：BD Fortessa, FACSCantoll, LAS-4000, SpectraMax

Satsuki Murakami, Susumu Suzuki, Ichiro Hanamura, Kazuhiro Yoshikawa, Ryuzo Ueda, Masao Seto, Akiyoshi Takami
Combining T-cell-based immunotherapy with venetoclax elicits synergistic cytotoxicity to B-cell lines in vitro
Hematol Oncol. 2020 Dec;38(5):705-714.
主な使用機器：BD Fortessa, FACS Aria III, Amersham Imager 600

Yuichi Kawagashira, Haruki Koike, Mie Takahashi, Ken Ohyama, Masahiro Iijima, Masahisa Katsuno, Jun-Ichi Niwa, Manabu Doyu, Gen Sobue
Aberrant Expression of Nodal and Paranodal Molecules in Neuropathy Associated

With IgM Monoclonal Gammopathy With Anti-Myelin-Associated Glycoprotein Antibodies

J Neuropathol Exp Neurol. 2020 Dec 4;79(12):1303-1312.

主な使用機器：LSM710

Taiki Isaji, Koji Osuka, Yusuke Ohmichi, Mika Ohmichi, Munekazu Naito, Takashi Nakano, Kenichiro Iwami, Shigeru Miyachi

Expression of Angiopoietins and Angiogenic Signaling Pathway Molecules in Chronic Subdural Hematomas

J Neurotrauma. 2020 Dec 1;37(23):2493-2498.

主な使用機器：LAS-4000

Aya Yamamura, Md Junayed Nayeem, Motohiko Sato

The Rho kinase (ROCK2)-specific inhibitor KD025 ameliorates the development of pulmonary arterial hypertension

BBRC. 2021 Jan 1;534:795-801.

主な使用機器：StepOnePlus, Amersham Imager 600, SpectraMax

Kaori Uchino, Lam Vu Quang, Shohei Mizuno, Tomohiro Horio, Hidesuke Yamamoto, Ichiro Hanamura, Yoshihisa Koderu, J Luis Espinoza, Makoto Onizuka, Koichi Kashiwase, Yasuo Morishima, Takahiro Fukuda, Noriko Doki, Koichi Miyamura, Takehiko Mori, Eriko Morishita, Shinji Nakao, Akiyoshi Takami

Donor UNC-93 Homolog B1 genetic polymorphism predicts survival outcomes after unrelated bone marrow transplantation

Genes Immun. 2021 Feb 24;1-9.

主な使用機器：StepOnePlus

Mohammad Sarif Mohiuddin, Tatsuhito Himeno, Yuichiro Yamada, Yoshiaki Morishita, Masaki Kondo, Shin Tsunekawa, Yoshiro Kato, Jiro Nakamura, Hideki Kamiya

Glucagon Prevents Cytotoxicity Induced by Methylglyoxal in a Rat Neuronal Cell

Line Model

Biomolecules. 2021 Feb 15;11(2):287.

主な使用機器：IX73, SpectraMax

Rina Okada, Kazunari Onodera, Takuji Ito, Manabu Doyu, Hirotaka James Okano,
Yohei Okada

Modulation of oxygen tension, acidosis, and cell density is crucial for neural
differentiation of human induced pluripotent stem cells

Neurosci Res. 2021 Feb;163:34-42.

主な使用機器：StepOnePlus, LSM710