

研究業績

2016 年

Khan KN, Fujishita A, Masumoto H, Muto H, Kitajima M, Masuzaki H, Kitawaki J.
Molecular detection of intrauterine microbial colonization in women with endometriosis.
Eur J Obstet Gynecol Reprod Biol. 199:69-75. doi: 10.1016/j.ejogrb.2016.01.040. **2016.**

Ota Y, Chinen T, Yoshida K, Kudo S, Nagumo Y, Shiwa Y, Yamada R, Umihara H, Iwasaki K,
Masumoto H, Yokoshima S, Yoshikawa H, Fukuyama T, Kobayashi J, Usui T.
Eudistomin C, an Antitumor and Antiviral Natural Product, Targets 40S Ribosome and Inhibits
Protein Translation. Chembiochem. 17(17):1616-20. doi: 10.1002/cbic.201600075. **2016.**

2017 年

Shimamoto Y, Tamura S, Masumoto H, Maeshima K.
Nucleosome-nucleosome interactions via histone tails and linker DNA regulate nuclear rigidity.
Mol Biol Cell. 28(11):1580-1589. doi: 10.1091/mbc.E16-11-0783. **2017.**

Kubo Y, Masumoto H, Izumida M, Kakoki K, Hayashi H, Matsuyama, T.
Rab3a-Bound CD63 Is Degraded and Rab3a-Free CD63 Is Incorporated into HIV-1 Particles.
Frontiers in Microbiology, 8, Article 1653, **2017.**

2018 年

Masumoto H, Matsuyama S.
The combination of NAD⁺-dependent deacetylase gene deletion and the interruption of
gluconeogenesis causes increased glucose metabolism in budding yeast.
PLoS One, 13(3):e0194942. doi: 10.1371/journal.pone.0194942. **2018.**

2019 年

Takatsuki H, Agbemabiese CA, Nakagomi T, Pun SB, Gauchan P, Muto H, Masumoto H,
Atarashi R, Nakagomi O, Pandey BD.
Whole genome characterisation of G11P[25] and G9P[19] rotavirus A strains from adult
patients with diarrhoea in Nepal.
Infect Genet Evol. 69:246-254. doi:10.1016/j.meegid.2019.02.007. **2019.**

CRISPR/Transposon gene integration (CRITGI) can manage gene expression in a retrotransposon-dependent manner.

Hanasaki M, Masumoto H

***Scientific reports* 9(1) 15300 2019.**

Utilization of Natural Detergent Potassium Laurate for Decellularization in Lung Bioengineering.

Obata T, Tsuchiya T, Akita S, Kawahara T, Matsumoto K, Miyazaki T, Masumoto H, Kobayashi E, Niklason LE, Nagayasu T

***Tissue engineering. Part C, Methods* 25(8) 459-471 2019.**

Bacteroides in colonic mucosa-associated microbiota affects the development of minimal hepatic encephalopathy in patients with cirrhosis.

Masafumi Haraguchi, Satoshi Miuma, Hiroshi Masumoto, Tatsuki Ichikawa, Yasuko Kanda, Ryu Sasaki, Masanori Fukushima, Hisamitsu Miyaaki, Naota Taura, Kazuhiko Nakao

***Hepatology international* 13(4) 482-489 2019.**

2020 年

Deletion of the GAPDH gene contributes to genome stability in *Saccharomyces cerevisiae*.

Miki Hanasaki, Keisuke Yaku, Motohiro Yamauchi, Takashi Nakagawa, Hiroshi Masumoto

***Scientific reports* 10(1) 21146-21146 2020.**

Exploration of Pericyte-Derived Factors Implicated in Lung Cancer Brain Metastasis Protection: A Pilot Messenger RNA Sequencing Using the Blood-Brain Barrier In Vitro Model.

Kenta Ujifuku, Takashi Fujimoto, Kei Sato, Yoichi Morofuji, Hideki Muto, Hiroshi Masumoto, Shinsuke Nakagawa, Masami Niwa, Takayuki Matsuo

***Cellular and molecular neurobiology* 42(4) 9971004 2020.**

Damaged Myofiber-Derived Metabolic Enzymes Act as Activators of Muscle Satellite Cells.

Yoshifumi Tsuchiya, Yasuo Kitajima, Hiroshi Masumoto, Yusuke Ono

***Stem cell reports* 15(4) 926-940 2020.**

Deep sequence analysis of NS5A resistance-associated substitution changes in patients reinfected with the hepatitis C virus after liver transplantation.

Shinobu Yamamichi, Satoshi Miuma, Takayuki Wada, Hiroshi Masumoto, Yasuko Kanda, Hidetaka Shibata, Hisamitsu Miyaaki, Naota Taura, Tatsuki Ichikawa, Taro Yamamoto, Kazuhiko Nakao

***Journal of viral hepatitis* 27(5) 552-555 2020.**

2021 年

A SNARE geranylgeranyltransferase essential for the organization of the Golgi apparatus.

Ryutaro Shirakawa, Sakurako Goto-Ito, Kota Goto, Shonosuke Wakayama, Haremaru Kubo, Natsumi Sakata, Duc Anh Trinh, Atsushi Yamagata, Yusuke Sato, Hiroshi Masumoto, Jinglei Cheng, Toyoshi Fujimoto, Shuya Fukai, Hisanori Horiuchi

***The EMBO journal* 39 e104120 2020.**

Levofloxacin or gonadotropin releasing hormone agonist treatment decreases intrauterine microbial colonization in human endometriosis

Khaleque N Khan, Akira Fujishita, Hideki Muto, Hiroshi Masumoto, Kanae Ogawa, Akemi Koshiba, Taisuke Mori, Kyoko Itoh, Satoshi Teramukai, Katsuya Matsuda, Masahiro Nakashima, Jo Kitawaki

***European Journal of Obstetrics & Gynecology and Reproductive Biology* 264 103-116 2021.**

Bile extracellular vesicles from end-stage liver disease patients show altered microRNA content.

Suguru Nakashiki, Satoshi Miuma, Hiroyuki Mishima, Hiroshi Masumoto, Masaaki Hidaka, Akihiko Soyama, Yasuko Kanda, Masanori Fukushima, Masafumi Haraguchi, Ryu Sasaki, Hisamitsu Miyaaki, Tatsuki Ichikawa, Mitsuhsa Takatsuki, Susumu Eguchi, Koh-Ichiro Yoshiura, Kazuhiko Nakao

***Hepatology international* 15(3) 821-830 2021.**

Peptidyl-prolyl cis-trans isomerase A participates in the selenium transport into the rat brain

Suguru Nakashiki, Satoshi Miuma, Hiroyuki Mishima, Hiroshi Masumoto, Masaaki Hidaka, Sakura Yoshida, Akinori Yamamoto, Hiroshi Masumoto, Takeshi Fuchigami, Akira Toriba,

Mamoru Haratake, Morio Nakayama.

Journal of biological inorganic chemistry 26(8) 993-945 **2021**.

RNA Sequencing Data Analysis on the Maser Platform and the Tag-Count Comparison Graphical User Interface.

Kenta Ujifuku, Yoichi Morofuji, Hiroshi Masumoto.

Methods in molecular biology (Clifton, N.J.) 2535 157-170 **2022**.

The Ty1 retrotransposon harbors a DNA region that performs dual functions as both a gene silencing and chromatin insulator.

Hiroshi Masumoto, Hideki Muto, Koichi Yano, Yohei Kurosaki, Hironori Niki

Scientific reports, 14(1) 16641-16641 **2024**.

Structural insights into how DEK nucleosome binding facilitates H3K27 trimethylation in chromatin.

Tomoya Kujirai, Kenta Echigoya, Yusuke Kishi, Mai Saeki, Tomoko Ito, Junko Kato, Lumi Negishi, Hiroshi Kimura, Hiroshi Masumoto, Yoshimasa Takizawa, Yukiko Gotoh, Hitoshi Kurumizaka

Nature structural & molecular biology, <https://doi.org/10.1038/s41594-025-01493-w>. **2025**.

特許関連

2018 年

氏名：増本博司，特許権名称：遺伝子欠損エタノール生産菌，番号：特願 2014-051675、
2014.3.16 出願，特許取得：2018.1.19

2019 年

氏名：増本博司，特許権名称：Cas9 スクレアーゼを用いて相同組み換えを誘導する方法

番号：特願 2019-209165 日時：2019 年 11 月 19 日 出願 特許出願中

2021 年

氏名：増本博司，特許権名称：多重遺伝子導入手法、番号：特願 2017-097706、日時：
2017.5.16 出願，特許取得：2021.12.8，特許番号：6990385