

発表論文

1. Fujita Y., Hayashi T., Kiyomitsu T., Toyoda Y., Kokubu A., Obuse C., Yanagida M.
Priming of Centromere for CENP-A Recruitment by Human hMis18α, β and M18BP.
Dev. Cell, **12**, 17-30 (2007).
2. Saadat I., Higashi H., Obuse C., Umeda M., Kamiya M.K., Saito Y., Lu H., Ohnishi N., Azuma T., Suzuki A., Ohno S., Hatakeyama M.
Helicobacter pylori CagA targets PAR-1/MARK kinase to disrupt epithelial cell polarity
Nature, **447**, 330-3 (2007).
3. Imura A., Tsuji Y., Murata M., Maeda R., Kubota K., Iwano A., Obuse C., Togashi K., Tominaga M., Kita N., Tomiyama K., Iijima J., Nabeshima Y., Fujioka M., Asato R., Tanaka S., Kojima K., Ito J., Nozaki K., Hashimoto N., Ito T., Nishio T., Uchiyama T., Fujimori T., Nabeshima Y-I.
alpha-Klotho as a regulator of calcium homeostasis
Science, **316**, 1615-8 (2007).
4. Kiyomitsu T., Obuse C., Yanagida M.
Human Blinkin/AF15q14 Is Required for Chromosome Alignment and the Mitotic Checkpoint through Direct Interaction with Bub1 and BubR1
Dev. Cell, **13**, 663-76 (2007).
5. Kimata Y., Matsuyama A., Nagao K., Furuya K., Obuse C., Yoshida M., Yanagida M.
Diminishing HDACs by drugs or mutations promotes normal or abnormal sister chromatid separation by affecting APC/C and adherin.
J Cell Sci., **121**, 1107-18 (2008).
6. Furukawa J.-i., Shinohara Y., Kuramoto H., Miura Y., Shimaoka H., Kuroguchi M., Nakano M., Nishimura S.-I.
A comprehensive approach to structural and functional glycomics based on chemoselective glycoblotting and sequential tag conversion
Anal. Chem., **4**, 1094-101 (2008).
7. Miura Y., Hato M., Shinohara Y., Kuramoto H., Furukawa J.-i., Kuroguchi M., Shimaoka H., Tada M., Nakanishi K., Ozaki M., Todo S., Nishimura S.-I.
BlotGlycoABCTM: An integrated glycoblotting technique for rapid and large-scale clinical glycomics
Mol. Cell. Proteom., **7**, 370-7 (2008).
8. Fujimura T., Shinohara Y., Tissot B., Pang P.-C., Kuroguchi M., Saito S., Arai Y., Sadilek M., Murayama K., Dell A., Nishimura S.-I., Hakomori S.
Glycosylation status of haptoglobin in sera of patients with prostate cancer vs. benign prostate disease or normal subjects
Intl. J. Cancer, **122**, 39-49 (2008).
9. Kita Y., Miura Y., Furukawa J., Nakano M., Shinohara Y., Ohno M., Takimoto A., Nishimura S.-I.
Quantitative glycomics of human whole serum glycoproteins based on the standardized protocol for liberating N-glycans
Mol. Cell. Proteom., **6**, 1437-45 (2007).
10. Miura Y., Shinohara Y., Furukawa J., Nagahori N., Nishimura S.-I.
Rapid and Simple Solid-Phase Esterification of Sialic Acid Residues for Quantitative Glycomics by Mass Spectrometry (p NA)
Chem. Eur. J., **13**, 4797- 804 (2007).
11. Ito H., Yamada K., Deguchi K., Nakagawa H., Nishimura S.-I.
Structural assignment of disialylated biantennary N-glycan isomers derivatized with 2-aminopyridine using negative-ion multistage tandem mass spectral matching
Rapid Commun. Mass Spectrom., **21**, 212-8 (2007).
12. Deguchi K., Ito H., Baba T., Hirabayashi A., Nakagawa H., Fumoto M., Hinou H., Nishimura S.-I.
Structural analysis of O-glycopeptides employing negative- and positive-ion MS_n spectra obtained by collision-induced and electron-capture dissociations in linear ion trap time-of-flight mass spectrometry
Rapid Commun. Mass Spectrom., **21**, 691-8 (2007).
13. Ito H., Akiyama M., Nakagawa H., Uematsu R., Deguchi K., McMillan J.R., Nishimura S.-I., Shimizu H.
N-Linked neutral oligosaccharides in the stratum corneum of normal and ichthyotic skin
Arch. Dermatol Res., **298**, 403-7 (2007).
14. Nakagawa H., Hato M., Takegawa Y., Deguchi K., Ito H., Takahata M., Iwasaki N., Minami A., Nishimura S.-I.
Detection of altered N-glycan profiles in whole serum from rheumatoid arthritis patients
J. Chromatogr. B, **853**, 133-7 (2007).
15. Andre S., Sanchez-Ruderisch H., Nakagawa H., Buchholz M., Kopitz J., Forberich P., Kemmner W., Bock C., Deguchi K., Detjen K. M., Wiedenmann B., Doeberitz M. K., Gress T. M., Nishimura S.-I., Rosewicz S., Gabius H.-J.
Tumor Suppressor p16INK4a: Modulator of Glycomic Profile and Galectin-1 Expression to Increase Susceptibility to Carbohydrate-Dependent Induction of Anoikis in Pancreatic Carcinoma Cells
FEBS J., **274**, 3233-56 (2007).
16. Kudo T., Nakagawa H., Takahashi M., Hamaguchi J., Kamiyama N., Yokoo H., Nakanishi K., Nakagawa T., Kamiyama T., Deguchi K., Nishimura S.-I., Todo S.
N-glycan alterations are associated with drug resistance in human hepatocellular carcinoma
Molecular Cancer, **6**, 32 (2007) .
17. Takahata M., Iwasaki N., Nakagawa H., Abe Y., Watanabe T., Ito M., Majima T., Minami A.
Sialylation of cell surface glycoconjugate is essential for osteoclastogenesis
Bone, **44**, 77-86 (2007).

18. Kyan A., Kamimura N., Hagisawa S., Hatakeyama S., Koie T., Yoneyama T., Arai Y., Nakagawa H., Nishimura S.-I., Miyoshi E., Hashimoto Y., Ohyama C.
Positive expression of N-acetylglucosaminyltransferase-V (GnT-V) and b1-6 branching N-linked oligosaccharides in human testicular germ cells diminish during malignant transformation and progression
Int. J. Oncol., **32**, 129-34 (2008).
19. Nakahara T., Hashimoto R., Nakagawa H., Monde K., Miura N., Nishimura S.-I.
Glycoconjugate Data Bank: Structures---an annotated glycan structure database and N-glycan primary structure verification service
Nucleic Acids Res., **36**, D368-71 (2008).
20. Matsuhashi T., Iwasaki N., Nakagawa H., Hato M., Kuroguchi M., Majima T., Minami A., Nishimura S.-I.
Alteration of N-glycans related to articular cartilage deterioration after anterior cruciate ligament transection in rabbits
Osteoarthr Cartilage, **16**, 772-8 (2008).
21. Fujioka Y., Noda NN., Fujii K., Yoshimoto K., Ohsumi Y., Inagaki F.
In vitro reconstitution of plant Atg8 and Atg12 conjugation systems essential for autophagy
J. Biol. Chem., **283**, 1921-8 (2008).
22. Marko-Varga G., Ogiwara A., Nishimura T., Kawamura T., Fujii K., Kawakami T., Kyono Y., Tu HK., Anyoji H., Kanazawa M., Akimoto S., Hirano T., Tsuboi M., Nishio K., Hada S., Jiang H., Fukuoka M., Nakata K., Nishiwaki Y., Kunito H., Peers IS., Harbron CG., South MC., Higenbottam T., Nyberg F., Kudoh S., Kato H.
Personalized medicine and proteomics: lessons from non-small cell lung cancer
J. Proteome Res., **6**, 2925-35 (2007).
23. Nishizawa A., Arshad AB., Nishizawa T., Asayama M., Fujii K., Nakano T., Harada K., Shirai M.
Cloning and characterization of a new hetero-gene cluster of nonribosomal peptide synthetase and polyketide synthase from the cyanobacterium *Microcystis aeruginosa* K-139
J. Gen. Appl. Microbiol., **53**, 17-27 (2007).
24. Kakisaka T., Kondo T., Okano T., Fujii K., Honda K., Endo M., Tsuchida A., Aoki T., Itoi T., Moriyasu F., Yamada T., Kato H., Nishimura T., Todo S., Hirohashi S.
Plasma proteomics of pancreatic cancer patients by multi-dimensional liquid chromatography and two-dimensional difference gel electrophoresis: up-regulation of leucine-rich alpha-2-glycoprotein in pancreatic cancer
J. Chromatogr. B, **852**, 257-67 (2007).
25. Kuroguchi M., Amano M., Fumoto M., Takimoto A., and Kondo H., Nishimura S.-I.
Reverse glycoblottting allows rapid enrichment glycoproteomics of biopharmaceuticals and disease-related biomarkers
Angew. Chem. Int. Ed., **46**, 8808-13 (2007).
26. Kitayama T., Yoshida Y., Furukawa J.-i., Kawai Y., Sawada S.
Asymmetric synthesis of triepoxyzerumbol
Tetrahedron: Asymmetry, **18**, 1676-81 (2007).
27. Son S.-H., Tano C., Furukawa J.-i., Furuike T., Sakairi N.
Stereoselective tris-glycosylation to introduce β - (1 \rightarrow 3)-branches into gentiotetraose for the concise synthesis of "phytoalexin-elicitor heptaglucoside"
Organic and Biomolecular Chemistry, **6**, 1441-9 (2008).

著書・総説・解説等

1. Miura Y., Nishimura S.-I.
BlotGlyco and glycoblottting for large scale, high throughput glycomics
Trends Glycosci. Glycotechnol., **20**, 17-27 (2008).
2. 天野麻穂, 西村紳一郎
高速化が進む糖鎖解析－糖鎖構造研究を加速する新しい解析法：グライコプロッティング法－
現代化学, 東京化学同人, **435**, 55-61 (2007).

国際学会・口頭発表

September 2007
New York, USA
CSHL meeting on Eukaryotic DNA replication & genome maintenance
Involvement of human ORC and TRF2 in pre-replication complex assembly at telomeres and telomere homeostasis
Tatsumi Y., Ezuta K., Yoshida K., Kiyono T., Ohta S., Obuse C., Fujita M.

September 2007
New York, USA
CSHL meeting on Eukaryotic DNA replication & genome maintenance
Comprehensive proteomic analyses of human heterochromatin protein 1 (HP1) interacting
Nozawa R., Nagao K., Iwasaki O., Obuse C.

September 2007
New York, USA
CSHL meeting on Eukaryotic DNA replication & genome maintenance
Identification and characterization of novel human ORC binding proteins
Seki T., Ohta S., Obuse C.

国内招待講演・口頭発表

2007年11月

東京都

第5回クロマチン・フロンティアーズ・ジャパン
「プロテオミクスによるヘテロクロマチン蛋白質を中心とした機能ネットワークの解明」

小布施力史

2007年12月

札幌市

The 12th Korea - Japan Cancer Research Workshop 2007
“Human MIS12 complex is required for kinetochore assembly and proper chromosome segregation”

小布施力史

2007年9月

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22nd Summer University in Hokkaido

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高橋先生を囲む会

「糖鎖解析の医学分野への展開」

中川裕章

2007年10月

東京都

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「Glycoblottting法の技術紹介と本法による疾患マーカー探索の現状」

三浦嘉晃

特許

2007/6/15 (特願: 2007-158899)

順相型2次元液体クロマトグラフィ

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