

CURRICULUM VITAE

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Education

1989 - 1992 Ph.D., Department of Biophysics & Biochemistry, Faculty of Science, The University of Tokyo. (Supervisors: Drs. Hikoichi Sakai and Eisuke Nishida)
Thesis Title: Activation and Functions of MAP kinase.
1987 - 1989 M.S., Department of Biophysics & Biochemistry, Faculty of Science, The University of Tokyo (Supervisors: Drs. Hikoichi Sakai and Eisuke Nishida)
1983 - 1987 B.Sc., Faculty of Science, The University of Tokyo.

Scientific Employment

October 2017 - present Principal Investigator, International Research Center for Neurointelligence, The University of Tokyo, Tokyo, Japan
October 2013 - present Professor, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan
April 2005 – September 2013 Professor, Institute of Molecular and Cellular Biosciences, The University of Tokyo, Tokyo, Japan
April 1998 – April 2005 Associate Professor, Institute of Molecular and Cellular Biosciences, The University of Tokyo, Tokyo, Japan
April 2003 - March 2006 Adjunct Professor, National Institute of Genetics, NIG, Mishima
April 2002 - March 2005 Adjunct Associate Professor, National Institute of Physiological Science, NIPS, Okazaki
May 1997 – February 1999 Visiting scientist, In Dr. Michael E. Greenberg's laboratory at Children's Hospital/Harvard Medical School, Boston, USA
October 1996 - April 1997 Visiting scientist, in Dr. Jonathan A. Cooper's laboratory at Fred Hutchinson Cancer Research Center, Seattle, USA
July 1993 - March 1998 Research Associate/ Assistant Professor, in Dr. Eisuke Nishida's laboratory at Institute for Virus Research, Kyoto University, Kyoto, Japan
April 1992 - June 1993 Post-doctoral fellow, in Dr. Eisuke Nishida's laboratory at the University of Tokyo, Tokyo, Japan

Current Advisory Board Member / Editorial Board member

Neuron, Advisory Board Member

Journal of Cell Biology, Editorial Board member

Development, Advisory Board Member

The EMBO Journal, Advisory Editorial Board Member

GLIA, Editorial Board member

Molecular Psychiatry, Editorial Board member

Life Science Alliance, Advisory Editorial Board Member

Stem Cell Reports, Editorial Board member

Frontiers in Neuroscience (Neurogenesis), Associate Editor

Frontiers in Cell and Developmental Biology (Developmental Epigenetics), Associate Editor

Genes to Cells, Associate Editor

The Declaration on Research Assessment (DORA), Advisory Board Member

Recent Selected Presentations (Invited) before COVID19 pandemic

- 2nd Neuroepigenetics & Neuroepitranscriptomics' conference, 2020/3/3-6 Nassau, Bahamas
- The Notch Meeting XI, 2019/10/6-10, Athens, Greece
- The International Brain Research Organization IBRO 2019 (Keynote speaker), 2019/9/21-25, Daegu, Korea
- Current Trends and Future Directions of Synapse-Circuit Plasticity Research 2019, 2019/9/3-6, Gotenba, Sizuoka
- NCCR-IRCN "22q" Workshop, Tokyo, 2019/7/6
- Center for Regenerative Therapies TU Dresden (CRTD) Summer Conference, 2019/6/28, Dresden, Germany
- The 13th Annual Meeting of the Japanese Society for Epigenetics 2019/5/28-29, Kanagawa
- 2nd Neurogenesis Conference (Life Science Alliance Journal Lecture) 2019/3/6, Nassau, Bahamas
- 2nd IRCN International Symposium, 2018/12/17, Fukutake Hall, UTokyo, Tokyo, Japan
- Neuroscience Program of Academia Sinica (NPAS) Seminar, 2018/12/5, Neuroscience Program of Academia Sinica (NPAS), Taipei, Taiwan
- National Chung Kung University (NCKU) Seminar, 2018/12/6, National Chung Kung University (NCKU), Tainan, Taiwan
- Japan-Asia-NIBR Drug Discovery and Translational Medicine Symposium, 2018/10/22, Tokyo, Japan
- Vienna BioCenter (VBC) Seminar, 2018/9/27, Vienna, Austria
- The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, 2018/9/6-8, Kobe, Japan
- Stem Cell Dynamics Throughout Life: From Development to the Adult, 2018/8/30, Basel, Switzerland
- International Society for Stem Cell Research (ISSCR) 2018 Annual Meeting, 2018/6/20-23, Melbourne, Australia
- The Company of Biologists Workshop: Development and evolution of the human neocortex, 2018/6/10-13, West Sussex, UK
- International Society for Developmental Neuroscience (ISDN) 2018, 2018/5/22-25, Nara, Japan
- Cold Spring Harbor (CSH) Asia2018, Stem Cell Crossroads, 2018/5/7-10, Suzhou, China
- Bordeaux Cajal School 2018, 2018/4/3-21, Bordeaux Cedex, France
- Cell Symposia. 2017/11/13, The University of Tokyo
- Keystone Symposia, Regenerative Biology and Applications, The University of Hong Kong, 2017/10/15-19, Hong Kong, China
- Italian Society for Neuroscience 2017 (Plenary lecture), 2017/10/1-4, Ischia, Italy
- EMBO Conference, Gene regulatory mechanisms in neural fate decisions, 2017/9/7-10, Alicante, Spain
- Japanese Society for Neuroscience 2017 (Special lecture), 2017/7/20-23, Chiba, Japan
- XIII European Meeting on Glial Cells 2017 (Plenary lecture), 2017/7/8-11, Edinburgh, UK
- EMBO Conference, Advances in Stem Cell and Regenerative Medicine, 2017/5/23-26, Heiderberg, Germany
- Society for Neuroscience 2016 (Special lecture), 2016/11/12-16, San Diego, USA
- EMBO workshop Neural Function and Cell Fate Choice, 2016/9/18-22, Kyllini, Greece
- Gordon Research Conference, Neural Development, 2016/7/31-8/5, Newport, USA
- Gordon Research Conference Molecular & Cellular Neurobiology, 2016/6/12-17, HongKong, China
- 18th International Neuroscience Winter Conference, 2016/4/2-6, Innsbruck, Austria

- Neurogenesis, 2016/3/2-5, Cancun, Mexico
- Sino-German Joint Symposium, Institute of Genetics and Developmental Biology, 2015/9/11-14, Beijing, China
- 25th Meeting of the International Society for Neurochemistry (ISN), 2015/8/23-27, Cairns, Australia
- Cold Spring Harbor (CSH) Asia Conference on International Brain Project, 2015/6/19-22, Suzhou, China
- 2nd UK/Japan workshop on Neural Epigenetics, London, UK, 2014/12/15-16
- The American Society for Cell Biology (ASCB) /IFCB Annual Meeting, 2014/12/6/10, Philadelphia PA, USA.
- Global controls in stem cells, 2014/11/5-7, ISSCR Singapore
- The Notch Meeting VIII, Notch signaling in the Nervous System, 2014/9/28-10/1, Athens, Greece
- International Society for Developmental Neuroscience (ISDN) 2014, Development, functions and disorders of the Nervous System, Montreal, Canada, 2014/7/19-24.
- Gordon Research Conferences /Phosphorylation & G-Protein Mediated Signaling Networks, 2014/6/15-20, Biddeford, USA.

Scientific Awards

- 22nd Kihara Memorial Foundation Academic Award
- 30th Inoue Prize for Science
- Prize for Medicine, Yasuda Memorial Foundation
- 24th Tsukahara Prize
- 6th Japan Academy Medal
- 6th JSPS PRIZE, Japan Society for the Promotion of Science
- Incitement Award of the Japanese Cancer Association
- Incitement Award of Mitsubishi Chemical Corp., The Molecular Biology Society of Japan

Research Grants

- AMED/CREST Advanced Research and Development Programs for Medical Innovation "Early Life Stage", 2019-24
- JSPS KAKENHI Scientific Research on Innovative Areas "Interplay of developmental clock and extracellular environment in brain formation" 2016-2020
- JSPS KAKENHI Grant-in-Aid for Scientific Research(S) 2015-19
- AMED/CREST Advanced Research and Development Programs for Medical Innovation "Homeostasis", 2014-19
- JSPS KAKENHI Grant-in-Aid for Scientific Research(A) 2015
- CREST/ Basic Research Programs "Brain Neural Network", 2012-15
- JSPS KAKENHI Scientific Research on Innovative Areas "Neocortical organization" 2010-14
- JSPS KAKENHI Grant-in-Aid for Scientific Research on Innovative Areas, 2010-2015
- JST-CREST/ "Basic Research Programs", 2009-2014
- JSPS KAKENHI Grant-in-Aid for Scientific Research(A) 2008-2010
- JSPS KAKENHI Grant-in-Aid for Scientific Research(A) 2006-2007
- JSPS KAKENHI Grant-in-Aid for Scientific Research on Priority Areas 2005-2009
- JSPS KAKENHI Grant-in-Aid for Scientific Research(B) 2004-2005
- JSPS Global COE Program "Integrative life science based on the study of biosignaling mechanisms" 2007-2011
- JST-SORST 2004-2006
- JSPS The 21st century COE program "Biological Signals" 2002-2006
- JSPS KAKENHI Grant-in-Aid for Young Scientists(A) 2002-2003
- JST-PRESTO 2001-2004
- JSPS KAKENHI Grant-in-Aid for Scientific Research(B) 2001-2002
- JSPS KAKENHI Grant-in-Aid for Scientific Research on Priority Areas 2000-2004
- JSPS KAKENHI Grant-in-Aid for Scientific Research(B) 1999-2000
- JSPS KAKENHI Grant-in-Aid for Scientific Research on Priority Areas(A)1999
- JST-PRESTO 1998-2001

(Research grants from private funding agencies)

- The Uehara Memorial Foundation, Designated research grants 2018-2020
- The Asahi Glass Foundation, Continuation Grant 2014
- Nagase Science and Technology Foundation 2014
- The Uehara Memorial Foundation, Research grants 2013
- The Yasuda Medical Foundation, 2013
- Takeda Science Foundation, 2009
- The Asahi Glass Foundation, Research Encouragement Grant, 2009
- Toray Science Foundation, Toray Science and Technology Grant, 2005
- The Mitsubishi Foundation, Research grant, 2005
- The Princess Takamatsu Cancer Research Fund, Research Grants, 2005
- The Uehara Memorial Foundation, Research grants 2005
- The Society of Japanese Women Scientists, 2004
- The Naito Foundation, The Naito Grant for the advancement of natural science, 2002
- The Uehara Memorial Foundation, Research grants 2001
- Astellas Foundation for Research on Metabolic Disorders, 1999-2001
- Haraguchi Memorial Cancer Research Foundation, 1999

Publications

Eto, H., Kishi, Y., Yakushiji-Kaminatsu, N., Sugishita, H., Utsunomiya, S., Koseki, H. and Gotoh, Y.
The Polycomb group protein Ring1 regulates dorsoventral patterning of the mouse telencephalon.
Nat. Comm., in press 2020.

Aoyama-Ishiwatari, S., Okazaki, T., Iemura, S., Natsume, T., Okada, Y. and Gotoh, Y.
NUDT21 links mitochondrial IPS-1 to RLR-containing stress granules and activates host antiviral defense.
J. Immunol. In press 2020.

Nagahama, K., Sakoori, K., Watanabe, T., Kishi, Y., Kawaji, K., Koebis, M., Nakao, K., Gotoh, Y., Aiba, A., Uesaka, N. and Kano, M.
Setd1a insufficiency in mice attenuates excitatory synaptic function and recapitulates Schizophrenia-related behavioral abnormalities.
Cell Rep. 32 (11):108126, 2020.

Kuwayama, N., Kishi, Y., Maeda, Y., Nishiumi, Y., Suzuki, Y., Koseki, H., Hirabayashi, Y. and Gotoh, Y.
In utero gene transfer system for embryos before neural tube closure reveals a role for Hmga2 in the onset of neurogenesis.
bioRxiv. 2020.

Imaizumi, Y., Furutachi, S., Watanabe, T., Miya, H., Kawaguchi, D. and Gotoh, Y.
Role of the imprinted allele of the Cdkn1c gene in mouse neocortical development.
Sci. Rep. doi: 10.1038/s41598-020-58629-9, 2020.

Tsuboi, M. and Gotoh, Y.
Endfoot regrowth for neural stem cell renewal.
Nat. Cell Biol. 22, 3-5, 2020. news & views.

Sakai, H., Fujii, Y., Kuwayama, N., Kawaji, K., Gotoh, Y. and Kishi, Y.
Plag1 regulates neuronal gene expression and neuronal differentiation in neocortical neural progenitor cells.
Genes Cells. 24, 650-666, 2019.

Kawaguchi, D. and Gotoh, Y.
Neurexin nanoclusters: A novel structure at presynaptic terminals
J. Cell Biol. 218, 2442-2443, 2019. Spotlight.

Tsuboi, M., Hirabayashi, Y. and [Gotoh, Y.](#)
Diverse gene regulatory mechanisms mediated by Polycomb group proteins during neural development
Curr. Opin. Neurobiol. 59, 164-173, 2019.

Tanaka, H., Okazaki, T., Aoyama, S., Yokota, M., Koike, M., Okada, Y., Fujiki, Y. and [Gotoh, Y.](#)
Peroxisomes control mitochondrial dynamics and the mitochondrion-dependent pathway of apoptosis.
J. Cell Sci., 2019, doi: 10.1242/jcs.224766.

Tsuboi, M., Kishi, Y., Kyojuka, W., Koseki, H., Hirabayashi, Y. and [Gotoh, Y.](#)
Ubiquitination-independent repression of PRC1 targets during neuronal fate restriction in the developing mouse neocortex.
Dev. Cell 47, 758-772, 2018.

Kishi, Y. and [Gotoh, Y.](#)
Regulation of chromatin structure during neural development.
Frontiers Neurosci. 12, 874, 2018. Review

Okazaki, T. and [Gotoh, Y.](#)
An unexpected calm: Mfge8 controls stem cell quiescence and maintenance.
Cell Stem Cell 23, 311-312, 2018. Preview.

Lanjakornsiripan, D., Pior, B.J., Kawaguchi, D., Furutachi, S., Tahara, T., Katsuyama, Y., Suzuki, Y., Fukazawa, F. and [Gotoh, Y.](#)
Layer-specific heterogeneity of astrocytes and its dependence on neuronal layers.
Nat. Comm. 9,1623, 2018.

Kawai, H., Kawaguchi, D., Kuebrich, B.D., Kitamoto, T., Yamaguchi, M., [Gotoh, Y.](#), and Furutachi, S.
Area-Specific Regulation of Quiescent Neural Stem Cells by Notch3 in the Adult Mouse Subependymal Zone
J Neurosci. 37, 11867-11880, 2017.

Itoh, Y., Higuchi, M., Oishi, K., Kishi, Y., Okazaki, T., Sakai, H., Miyata, T., Nakajima, K., [Gotoh, Y.](#)
The PDK1-Akt Pathway Regulates Radial Neuronal Migration and Microtubules in the Developing Mouse Neocortex
Proc. Natl. Acad. Sci. U.S.A. 113(21):E2955-64, 2016

Nagao, M., Ogata, T., Sawada, Y., and [Gotoh, Y.](#)
Zbtb20 promotes astrocytogenesis during neocortical development
Nat. Comm. 7, 11102, 2016.

Furutachi, S., Miya, H., Watanabe, T., Kawai, H., Yamasaki, N., Harada, Y., Imayoshi, I., Nelson, M., Nakayama, K.I., Hirabayashi, Y., and [Gotoh, Y.](#)
Slowly dividing neural progenitors are an embryonic origin of adult neural stem cells.
Nat. Neurosci. 18, 657-665, 2015.

Okazaki, T., Higuchi, M., Takeda, K., Iwatuki-Horimoto, K., Kiso, M., Miyagishi, M., Yanai, H., Kato, A., Yoneyama, M., Fujita, T., Taniguchi, T., Kawaoka, Y., Ichijo, H. and [Gotoh, Y.](#)
The ASK family kinases differentially mediate induction of type I interferon and apoptosis during the antiviral response.
Sci. Signal. 8, ra78. Doi: 10.1126/scisignal.aab1883, 2015.

Oshiro, H., Hirabayashi, Y., Furuta, Y., Okabe, S. and [Gotoh, Y.](#)
Up-regulation of HP1g expression during neuronal maturation promotes axonal and dendritic development in mouse embryonic neocortex.
Genes Cells 20, 108-120, 2015.

Morimoto-Suzuki, N., Hirabayashi, Y., Tyssowski, K., Singa, J., Vidal, M., Koseki, H. and [Gotoh, Y.](#)

The polycomb component Ring1B regulates the timed termination of subcerebral projection neuron production during mouse neocortical development.

Development, 141, 4343-4353, 2014.

Nagao, M., Lanjakornsiripan, D., Itoh, Y., Kishi, Y., Ogata, T. and [Gotoh, Y.](#)

High mobility group nucleosome-binding family proteins promote astrocyte differentiation of neural precursor cells.

Stem Cells, 32, 2983-2997, 2014.

Kuwahara, A., Sakai, H., Xu, Y., Itoh, Y., Hirabayashi, Y. and [Gotoh, Y.](#)

Tcf3 represses Wnt- β -catenin signaling and maintains neural stem cell population during neocortical development.

PLoS One, 9, e94408, 2014.

Tyssowski, K., Kishi, Y. and [Gotoh, Y.](#)

Chromatin regulation of neural development

Neuroscience, 264, 4-16, 2014 doi:10.1016/j.neuroscience.2013.10.008, 2013.

Itoh, Y., Tyssowski, K. and [Gotoh, Y.](#)

Transcriptional coupling of neuronal fate commitment and the onset of migration.

Curr. Opin. Neurobiol. 23, 957-964, 2013.

Okazaki, T., Higuchi, M. and [Gotoh, Y.](#)

Mitochondrial localization of the antiviral signaling adaptor IPS-1 is important for its induction of caspase activation.

Genes Cells 18, 493-501, 2013.

Kawaguchi, D., Furutachi, S., Kawai, H., Hozumi, K. and [Gotoh, Y.](#)

Dll1 maintains quiescence of adult neural stem cells and segregates asymmetrically during mitosis.

Nat. Commun. 4, 1880, 2013.

Furutachi, S., Matsumoto, A., Nakayama, K.I. and [Gotoh, Y.](#)

p57 controls adult neural stem cell quiescence and modulates the pace of lifelong neurogenesis.

EMBO J. 32, 970-981, 2013.

Fujii, Y., Kishi, Y. and [Gotoh, Y.](#)

IMP2 regulates differentiation potentials of mouse neocortical neural precursor cells.

Genes Cells. 18, 79-89, 2013.

Itoh, Y., Moriyama, Y., Hasegawa, T., Endo, T.A., Toyoda, T. and [Gotoh, Y.](#)

Scratch regulates neuronal migration onset via an epithelial-mesenchymal transition-like mechanisms.

Nat. Neurosci. 16, 416-425, 2013.

Higuchi, M., Kihara, R., Okazaki, T., Aoki, I., Suetsugu, S. and [Gotoh, Y.](#)

Akt1 promotes focal adhesion disassembly and cell motility through phosphorylation of FAK in growth factor-stimulated cells.

J. Cell Sci. 126, 745-755, 2013.

Kishi, Y., Fujii, Y., Hirabayashi, Y. and [Gotoh, Y.](#)

HMGA proteins regulate global chromatin state and the neurogenic potential in neocortical precursor cells.

Nat. Neurosci. 15, 1127-1133, 2012.

Onoguchi, M., Hirabayashi, Y., Koseki, H. and [Gotoh, Y.](#)

A noncoding RNA regulates the neurogenin1 gene locus during mouse neocortical development.

Proc. Natl. Acad. Sci. U.S.A. 109, 16939-16944, 2012.

Aoki I., Higuchi M., [Gotoh Y.](#)

NEDDylation controls the target specificity of E2F1 and apoptosis induction.
Oncogene, doi: 10.1038/onc.2012.428., 2012.

Kishi, Y., Kondo, S. and Gotoh, Y.
Transcriptional activation of mouse major satellite regions during neuronal differentiation.
Cell Struct. Funct. 37, 101-110, 2012.

Watatani, K., Hirabayashi, Y., Itoh, Y. and Gotoh, Y.
PDK1 regulates the generation of oligodendrocyte precursor cells at an early stage of mouse telencephalic development.
Genes Cells 17, 326-335, 2012.

Ip, J.P., Shi, L., Chen, Y., Itoh, Y., Fu, W.Y., Betz, A., Yung, W.H., Gotoh, Y., Fu, A.K. and Ip, N.Y.
 α 2-chimaerin controls neuronal migration and functioning of the cerebral cortex through CRMP-2.
Nat. Neurosci. 15, 39-47, 2011.

Hirabayashi, Y. and Gotoh, Y.
Epigenetic control of neural precursor cell fate during development.
Nat. Rev. Neurosci. 11, 377-388, 2010.

Kuwahara, A., Hirabayashi, Y., Knoepfler, P.S., Taketo, M.M., Sakai, J., Kodama, T. and Gotoh, Y.
Wnt signaling and its downstream target N-myc regulate basal progenitors in the developing neocortex.
Development 137, 1035-1044, 2010.

Miyata, T., Kawaguchi, D., Kawaguchi, A. and Gotoh, Y.
Mechanisms that regulate the number of neurons during mouse neocortical development.
Curr. Opin. Neurobiol. 20, 22-28, 2010.

Hirabayashi, Y., Suzuki, N., Tsuboi, M., Endo, T.A., Toyoda, T., Shinga, J., Koseki, H., Vidal, M. and Gotoh, Y.
Polycomb limits the neurogenic competence of neural precursor cells to promote astrogenic fate transition.
Neuron 63, 600-613, 2009.

Oishi, K., Watatani, K., Itoh, Y., Okano, H., Guillemot, F., Nakajima, K. and Gotoh, Y.
Selective induction of neocortical GABAergic neurons by the PDK1-Akt pathway through activation of Mash1.
Proc.Natl.Acad.Sci.USA 106, 13064-13069, 2009.

Higuchi, M., Onishi, K., Yoneyama, C. and Gotoh, Y.
Scaffolding function of PAK in the PDK1-Akt pathway.
Nat. Cell Biol. 10, 1356-1364, 2008.

Kawaguchi, D., Yoshimatsu, T., Hozumi, K. and Gotoh, Y.
Selection of differentiating cells by different levels of delta-like 1 among neural precursor cells in the developing mouse telencephalon.
Development 135, 3849-3858, 2008.

Mori, Y., Higuchi, M., Hirabayashi, Y., Fukuda, M. and Gotoh, Y.
JNK phosphorylates Syt 4 and enhances Ca²⁺-evoked release.
EMBO J. 27, 76-87, 2008.

Itoh, Y., Masuyama, N., Nakayama, K., Nakayama, K.I. and Gotoh, Y.
The cdk inhibitors p57 and p27 regulate neuronal migration in the developing mouse neocortex.
J. Biol. Chem. 282, 390-396, 2007.

Onishi, K., Higuchi, M., Asakura, T., Masuyama, N., and Gotoh, Y.
The PI3K-Akt pathway promotes microtubule stabilization in migrating fibroblasts.

Genes Cells 12, 535–546, 2007.

Adachi, K., Mirzadeh, Z., Sakaguchi, M., Yamashita, T., Nikolcheva, T., Gotoh, Y., Peltz, G., Gong, L., Kawase, T., Alvarez-Buylla, A., Okano, H., and Sawamoto, K. Beta-catenin signaling promotes proliferation of progenitor cells in the adult mouse subventricular zone.

Stem Cells 25, 2827-2836, 2007.

Hayakawa-Yano, Y., Nishida, K., Fukami, S., Gotoh, Y., Hirano, T., Nakagawa, T., Shimazaki, T. and Okano, H. EGF-signaling mediated by Gab1 is required for the spatiotemporally regulated proliferation of Olig2-expressing progenitors in the embryonic spinal cord.

Stem Cells 25, 1410 – 1422, 2007.

Ura, S., Nishina, H., Gotoh, Y. and Katada, T.

Activation of the c-Jun N-terminal kinase pathway by MST1 is essential and sufficient for the induction of chromatin condensation during apoptosis.

Mol. Cell Biol. 27, 5514-5522, 2007.

Yoshizaki, H., Mochizuki, N., Gotoh, Y. and Matsuda, M.

Akt-PDK1 complex mediates EGF-induced membrane protrusion through Ral activation.

Mol. Biol. Cell. 18, 119-128, 2007.

Yoshimatsu, T., Kawaguchi, D., Oishi, K., Takeda, K., Akira, S., Masuyama, N. and Gotoh, Y.

Non-cell-autonomous action of STAT3 in maintenance of neural precursor cells in the mouse neocortex.

Development 133, 2553-2563, 2006.

Sunayama, J., Tsuruta, F., Masuyama, N. and Gotoh, Y.

JNK antagonizes Akt-mediated survival signals by phosphorylating 14-3-3.

J. Cell. Biol. 170, 295-304, 2005.

Hirabayashi, Y. and Gotoh, Y.

Stage-dependent fate determination of neural precursor cells in mouse forebrain.

Neurosci. Res. 51, 331-336, 2005.

Takada, T., Suzuki, H., Gotoh, Y. and Sugiyama, Y.

Regulation of the cell surface expression of human BCRP/ABCG2 by the phosphorylation state of Akt in polarized cells.

Drug Metab. Dispos. 33, 905-909, 2005.

Oishi, K., Kamakura, S., Isazawa, Y., Yoshimatsu, T., Kuida, K., Nakafuku, M., Masuyama, N. and Gotoh, Y.

Notch promotes survival of neural precursor cells via mechanisms distinct from those regulating neurogenesis.

Dev. Biol. 276, 172-184, 2004.

Kamakura, S., Oishi, K., Yoshimatsu, T., Nakafuku, M., Masuyama, N. and Gotoh, Y.

Hes binding to STAT3 mediates crosstalk between Notch and JAK-STAT signaling.

Nat. Cell Biol. 6, 547-554, 2004

Tsuruta, F., Sunayama, J., Mori, Y., Shimizu, S., Tsujimoto, Y., Yoshioka, K., Masuyama, N. and Gotoh, Y.

JNK promotes Bax translocation to mitochondria through phosphorylation of 14-3-3 proteins.

EMBO J. 23, 1889-1899, 2004.

Hirabayashi, Y., Itoh, Y., Tabata, H., Nakajima, K., Akiyama, T., Masuyama, N. and Gotoh, Y.

The Wnt-beta-catenin pathway directs neuronal differentiation of cortical neural precursor cells.

Development 131, 2791-2801, 2004.

Mori, Y., Higuchi, M., Masuyama, N. and Gotoh, Y.

Adenosine A2A receptor facilitates calcium-dependent protein secretion through the activation of protein kinase A and phosphatidylinositol-3 kinase in PC12 cells.

Cell Struct. Funct. 29, 101-110, 2004.

Miyagi, S., Saito, T., Mizutani, K., Masuyama, N., Gotoh, Y., Iwama, A., Nakauchi, H., Masui, S., Niwa, H., Nishimoto, M., Muramatsu, M. and Okuda, A.

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Mol. Cell. Biol. 24, 4207-4220, 2004.

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Cell Death Differ. 11, 771-781, 2004.

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Oxidative stress induces insulin resistance by activating the nuclear factor-B pathway and disrupting normal subcellular distribution of phosphatidylinositol 3-kinase.

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The phosphatidylinositol-3 kinase (PI3K)-Akt pathway suppresses neurite branch formation in NGF-treated PC12 cells.

Genes Cells 8, 657, 2003.

Suzawa, M., Takada, I., Yanagisawa, J., Ohtake, F., Ogawa, S., Yamaguchi, T., Kadowaki, T., Takeuchi, Y., Shibuya, H., Gotoh, Y., Matsumoto, K. and Kato, S. Cytokines suppress adipogenesis and PPAR-gamma function through the TAK1/TAB1/NIK cascade.

Nat. Cell Biol. 5, 224-230, 2003.

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Three Mitogen-Activated Protein kinases inhibit Insulin signaling by different mechanisms in 3T3-L1 adipocytes.

Mol. Endocrinology 17, 487-497, 2003.

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J. Biol. Chem. 278, 25802-25807, 2003.

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Akt enhances Mdm2-mediated ubiquitination and degradation of p53.

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