

CURRICULUM VITAE

Hiroaki Kaku, Ph.D.

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PERSONAL DATA

Place of Birth: Kumamoto, Japan

Date of Birth: April 10, 1974

Citizenship: Japan

EDUCATION

2004 Ph.D. Department of Immunology, Faculty of Medicine,
The University of Tokyo, Tokyo, Japan

2000 Research Student Department of Immunology, Faculty of Medicine,
The University of Tokyo, Tokyo, Japan

1999 M.S. Department of Developmental Medical Science, Faculty of Medicine,
The University of Tokyo, Tokyo, Japan

1997 B.S. Department of Health Sciences and Nursing, Graduate School of Medicine,
The University of Tokyo, Tokyo, Japan

PROFESSIONAL EXPERIENCE

- 2016-present
Medicine
- Assistant Professor at the Center for Immunobiology
Western Michigan University Homer Stryker M.D. School of
1000 Oakland Drive, Kalamazoo, MI 49008, US
- 2008-2016
- Institute Scientist at Dr. Rothstein's laboratory
Center for Oncology and Cell Biology,
The Feinstein Institute for Medical Research,
North Shore LIJ Health System,
350 Community Drive, Manhasset, NY, US
- 2006-2008
- Research Scientist at Dr. Rothstein's laboratory
Center for Oncology and Cell Biology,
The Feinstein Institute for Medical Research,
North Shore LIJ Health System,
350 Community Drive, Manhasset, NY, US
- 2005-2006
- Postdoctoral fellow at Dr. Rothstein's laboratory
Immunobiology Unit, Evans Biomedical Research Center,
Boston Medical Center, Boston, US
- 2004-2005
- Postdoctoral fellow at Dr. Takatsu's laboratory
Department of Immunology,
Institute of Medical Science,
The University of Tokyo, Tokyo, Japan

HONORS & AWARDS

- | | |
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| 2004-2005 | Japan Society for the Promotion of Science (JSPS)
Postdoctoral Fellowship (2004) |
| 2003-2004 | Japan Society for the Promotion of Science (JSPS)
Doctor Course (2003) |
| 2013 | Poster Award, The American Association of Immunologists
100 th Anniversary Annual Meeting |

Peer-reviewed Publications

1. **Kaku, H.**, Cheng, K.F., Al-Abed, Y., and Rothstein, T.L. (2014). A novel mechanism of B cell-mediated immune suppression through CD73 expression and adenosine production. *Journal of immunology* 193, 5904-5913.
2. Rothstein, T.L., Griffin, D.O., Holodick, N.E., Quach, T.D., and **Kaku, H.** (2013). Human B-1 cells take the stage. *Annals of the New York Academy of Sciences* 1285, 97-114.
3. Tumang, JR, Holodick, NE, Vizconde, TC, **Kaku, H.**, Frances, R and Rothstein, TL. 2011. A CD25-positive population of activated B1 cells expressed LIFR and responds to LIF. *Frontiers in Immunology*. 2:1-8.
4. **Kaku, H.**, T.L. Rothstein. 2010. Octamer binding protein 2 (Oct2) regulates PD-L2 gene expression in B-1 cells through lineage-specific activity of a unique, intronic promoter. *Genes. Immun.* 11 (1):55-66
5. **Kaku, H.**, T.L. Rothstein. 2009. Fas Apoptosis Inhibitory Molecule Expression in B Cells Is Regulated through IRF4 in a Feed-Forward Mechanism. *J. Immunol.* 183:5575-5581
6. **Kaku, H.**, T.L. Rothstein. 2009. Fas apoptosis inhibitory molecule enhances CD40 signaling in B cells and augments the plasma cell compartment. *J. Immunol.*183:1667-1674
7. Hara-Yokoyama, M., T. Kimura, **H. Kaku**, M. Wakiyama, Y. Kaitsu, M. Inoue, S. Kusano, M. Shirouzu, S. Yokoyama, T. Katada, Y. Hirabayashi, K. Takatsu, M. Yanagishita. 2008. Alteration of enzymatic properties of cell-surface antigen CD38 by agonistic anti-CD38 antibodies that prolong B cell survival and induce activation. *Int. Immunopharmacol.* 8:59-70.
8. Frances, R., J.R. Tumang, **H. Kaku**, S.M. Gurdak, T.L. Rothstein. 2006. B-1 cells express transgelin 2: Unexpected lymphocyte expression of a smooth muscle protein identified by proteomic analysis of peritoneal B-1 cells. *Mol. Immunol.* 43:2124-2129.
9. **Kaku, H.**, K. Horikawa, Y. Obata, H. Okamoto, N. Sakaguchi, S. Gerondakis, and K. Takatsu. 2002. NF- κ B is required for CD38-mediated induction of C γ 1 germline transcripts in murine B lymphocytes. *Int. Immunol.* 14:1055-1064.
10. Horikawa, K., **H. Kaku**, H. Nakajima, H.W. Davey, L. Henninghausen, I. Iwamoto, T. Yasue, A. Kariyone, and K. Takatsu. 2001. Essential role of signal transducer and activator of transcription (Stat) 5 for Interleukin-5-dependent IgH switch recombination in murine B cells. *J. Immunol.* 167:5018-5026.

LIST OF PRESENTATIONS

1. A novel mechanism of B-cell mediated immune suppression through adenosine production, Merinoff World Congress 2014, B-1 cell Development and Function, Tarrytown, NY, June 16-19, 2014. (oral and poster presentation)
2. A novel mechanism of B-cell mediated immune suppression through adenosine production, The American Association of Immunologists 100th Anniversary Annual Meeting, Honolulu, HI, US, May 3-7, 2013. (poster presentation)
3. CD73-high B-1a cells-a novel mouse B-1a cell population. Keyston symposia, B Cells: New Insight into Normal versus Dysregulated Function, Whistler, British Columbia, Canada, April 12-17, 2011. (poster presentation)
4. FAIM Enhances CD40 Signaling in B Cells, Augments the Plasma Cell Compartment, and Responds to IRF4 in a Positive Feed-Forward Fashion. Keyston symposia, B Cells in Context, Taos, NM, US, February 24-March 1, 2009. (poster presentation)
5. FAIM, a New Germinal Center Gene, Is Involved in CD40-Mediated B Cell Activation. Keyston symposia, Lymphocyte Activation and Signaling, Snowbird, Utah, US, February 3-8, 2008. **(invited oral presentation)**
6. G protein is involved in activation of murine B cells upon CD38 stimulation. 12th International Congress of Immunology, Montreal, Quebec, Canada, July 19-23, 2004. (poster presentation)
7. Chorea toxin inhibits NF- κ B activation and germline γ 1 expression induced by CD38-stimulation on murine B cells. The 33th Annual Meeting of the Japanese Society for Immunology, Fukuoka, Japan, December 8-10, 2003. (poster and oral presentation)
8. Role of NF- κ B activation in germline γ 1 expression in murine B cells upon CD38 stimulation. The American Association of Immunologists 90th Anniversary Annual Meeting, Denver,

Colorado, US, May 6-10, 2003. (poster presentation)

9. NF- κ B activation and germline γ 1 expression on murine B cells upon CD38 stimulation.
The 32th Annual Meeting of the Japanese Society for Immunology, Tokyo, Japan,
December 4-6, 2002. (poster and oral presentation)

10. Molecular mechanism of NF- κ B activation induced by CD38 stimulation in mouse B cells.
The 31th Annual Meeting of the Japanese Society for Immunology, Osaka, Japan, December
11-13, 2001. (poster presentation)

11. CD38 stimulation induces NF- κ B activation in mouse B cells.
The 30th Annual Meeting of the Japanese Society for Immunology, Sendai, Japan,
November 15-17, 2000. (poster and oral presentation)