

Curriculum Vitae

Name/Title: Takeshi Tsubata, MD, PhD

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Medical Research Institute
Tokyo Medical and Dental University
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Tokyo 113-8510, Japan

Education

1975-1981 School of Medicine, Kyoto University
1981 MD
1983-1987 Graduate School of Medicine, Kyoto University
1988 PhD (D. Med. Sc).

Employment

1981-1982 Clinical fellow, Kyoto University Hospital
1982-1983 Clinical fellow, Chest Disease Research Institute, Kyoto University
1987-1991 Research Associate, Department of Immunology,
Chest Disease Research Institute, Kyoto University
1988-1990 Alexander von Humboldt research fellow (Max-Planck Institute for
Immunobiology, Freiburg)
1991-1993 Research Associate, Department of Medical Chemistry,
School of Medicine, Kyoto University
1993-1996 Associate Professor, Department of Medical Chemistry,
School of Medicine, Kyoto University
1996-2003 Professor, Department of Immunology, Medical Research Institute,
Tokyo Medical and Dental University
2003-2012 Professor, Laboratory of Immunology, Graduate School of
Biomedical Sciences, Tokyo Medical and Dental University
2003-2010 Dean, Graduate School of Biomedical Sciences, Tokyo Medical and
Dental University
2012- Professor, Department of Immunology, Medical Research Institute,
Tokyo Medical and Dental University

Awards

- 1996 Japanese Biochemical Society Encouragement Prize
for Young Biochemists
- 2005 Philipp Franz von Siebold Prize from the President of Federal
Republic of Germany

Memberships

- Japanese Society of Immunology
Japanese Biochemical Society
Japanese Society of Chemical Biology
Japanese Society of Molecular Biology
Japanese Society of Cell Death
Japanese Society of Protein Phosphatase Research
Associate member, Science Council of Japan

Editorial Board

- Signal Transduction (2000-2007)
Microbiology and Immunology (1998-2001)
BMC Immunology (Associate Editor) (2008-)
Open Autoimmunity (2010-)
F1000Research (2012-)

Selected Publications:

Tsubata, T. and Reth, M. (1990): The products of pre-B specific genes ($\lambda 5$ and V_{preB}) and the immunoglobulin μ chain form a complex that is transported onto the cell surface. *J. Exp. Med.* 172: 973-976.

Murakami, M., Tsubata, T., Okamoto, M., Shimizu, A., Kumagai, S., Imura, H. and Honjo, T. (1992): Antigen-induced apoptotic death of Ly-1 B cells responsible for autoimmune disease in transgenic mice. *Nature* 357: 77-80.

Tsubata, T., Wu, J. and Honjo, T. (1993): B-cell apoptosis induced by antigen receptor crosslinking is blocked by T-cell signal through CD40. *Nature* 364: 645-648.

Adachi, T., Flaswinkel, H., Yakura, H., Reth, M., and Tsubata, T. (1998): The B cell surface protein CD72 recruits the tyrosine phosphatase SHP-1 upon tyrosine phosphorylation. *J. Immunol.* 160: 4662-4665.

Wakabayashi, C., Adachi, T., Wienands, J. and Tsubata, T. (2002): A distinct signaling pathway used by the IgG-containing B cell antigen receptor. *Science*. 298: 2392-2395.

Tsubata, T and Nitschke, L (2004) Molecular interactions regulate BCR signal inhibition by CD22 and CD72. *Trends in Immunol.* 25: 543-550.

Onodera, T., Poe, J. C., Tedder, T. F., Tsubata, T. (2008): CD22 regulates time course of both B cell division and antibody response. *J. Immunol.* 180: 907-913.

Zhu, C., Fujimoto, M., Sato, M., Yanagisawa, T., Tsubata, T. (2008): Novel binding site for SH2-containing protein tyrosine phosphatase-1 in CD22 activated by B Lymphocyte stimulation with antigen. *J. Biol. Chem.* 283: 1653-1659.

Abdu-Allah, H. H. M., Tamanaka, T., Yu J., Lu, Z., Sadagopan, M., Adachi. T., Tsubata, T., Kelm, S., Ishida, H. and Kiso, M. (2008): Design, synthesis, and structure-activity relationships of novel series of sialosides as CD22-specific inhibitors. *J. Med. Chem.* 51: 6665-6681.

Engels, N., König, L. M., Heemann, C., Lutz, J., Tsubata, T., Griep, S. and Wienands, J. (2009): The immunoglobulin tail tyrosine of surface IgG and IgE provides antigen receptor-intrinsic costimulation to class-switched B cells. *Nature Immunol.* 10:1018-1025.

Kishi, Y., Aiba, Y., Higuchi, T., Furukawa, K., Tokuhisa, T., Takemori, T. and Tsubata, T. (2010): Augmented antibody response with premature germinal center regression in CD40L-transgenic mice. *J. Immunol.* 185: 211-219.

Abdu-Allah, H. H. M., Watanabe, K., Completo, G. C., Sadagopan, M., Hayashizaki, K., Takaku, C., Tamanaka, T., Takematsu, H., Kozutsumi, Y., Paulson, J.C., Tsubata, T., Ando, H., Ishida, H. and Kiso, M. (2011): CD22-antagonists with nanomolar potency: The synergistic effect of hydrophobic groups at C-2 and C-9 of sialic acid scaffold. *Bioorg. Med. Chem.* 19: 1966-1971.

Kishi, Y., Higuchi, T., Phoon, S., Kamiya, K., Riemekasten, G., Akiyoshi, K., Weigert, M. and Tsubata, T. (2012): Apoptotic marginal zone deletion of anti-Sm/ribonucleoprotein B cells. *Proc. Natl. Acad. Sci. USA* 109: 7811-7816.

Tsubata, T. (2012): Role of inhibitory BCR co-receptors in immunity. *Infect Disord Drug Targets* 12:181-190.

Xu, M., Hou, R., Sato-Hayashizaki, A., Man, R., Zhu, C., Wakabayashi, C, Hirose, S., Adachi, T. and Tsubata, T. (2013): *CD72^c* is a modifier gene that regulates *Fas^{lpr}*-induced autoimmune disease. *J. Immunol.* 190: 5436-5445.

Li, Y., Takahashi, Y., Fujii, S., Suzuki, A., Tsubata, T., Hase, K. and Wang, J.-Y. (2016): EAF2 mediates germinal center B cell apoptosis to suppress excessive immune responses and prevent autoimmunity. *Nat. Commun.* 7: 10836.

Akatsu, C., Shinagawa, K., Numoto, N., Liu, Z., Konuscan, A.U., Aslam, M., Phoon, S., Adachi, T., Furukawa, K., Ito, N. and Tsubata, T. (2016): CD72 negatively regulates B lymphocyte responses to the lupus-related endogenous Toll-like receptor 7 ligand Sm/RNP. *J. Exp. Med.* 213: 2691-2706..

Tsubata, T (2017): B cell tolerance and autoimmunity. *F1000Research* 6 (F1000 Faculty Rev.): 391.