

Tae Jin Kim, M.D., Ph.D.

Professor
Sungkyunkwan University School of Medicine
Phone (office): 82-31-299-6161
E-MAIL: tjkim@skku.edu



Research Interest

B cell immune response, T-B cell interaction, function of innate lymphocytes, Cancer immunology (especially, cancer-infiltrating gamma-delta T cells), B cell-mediated autoimmune disease

Education and Careers

1982.3 – 1988.2 Seoul National University, College of Medicine, M.D.
1989.3 – 1991.2 Seoul National University, College of Medicine, Master (majoring in Pathology)
1991.3 – 1994.2 Seoul National University, College of Medicine, Ph.D. (majoring in Pathology)
1988.3 – 1989.2 Seoul National University Hospital, Intern
1989.3 – 1992.2 Seoul National University Hospital, Resident in Pathology
1992.3 – 1993.3 Seoul National University Cancer Center, Research Fellow
1993.4 – 1997.3 Massachusetts General Hospital Cancer Center & Harvard Medical School, Research fellow & associate
1997.4 – 1997.8 Seoul National University Allergy and Clinical Immunology Institute, Research Associate
1997.9 – present Sungkyunkwan University School of Medicine, assistant professor to full professor
2018.1 – 2021.12 Director of Basic Medical Sciences, Sungkyunkwan University School of Medicine
2020.1 – 2021.12 Chairman of Sungkyunkwan University Medical Research Institute
2020.1 – 2021.8 Vice president of Korean Experimental Hematology Society
2020.9 – present President of Korean Experimental Hematology Society

Publications

1. Hong, H., J. Lee, G.-Y. Park, S. Kim, J. Park, J. S. Park, Y. Song, S. Lee, T. J. Kim, Y. J. Lee, T.-Y. Roh, S.-K. Kwok, S. W. Kim, Q. Tan, and Y. Lee. 2022. Postnatal regulation of B-1a cell development and survival by the CIC-PER2-BHLHE41 axis. *Cell Rep* 38: 110386.
2. Lee, J. K., S. Y. Koo, H. M. Nam, J. B. Lee, J. Ko, K. M. Kim, E. J. Park, T. J. Kim, H. Lee, H. Go, and C. W. Lee. 2021. Ssu72 is a T-cell receptor-responsive modifier that is indispensable for regulatory T cells. *Cell Mol Immunol* 18: 1395-1411.
3. Lee, H. W., C. Park, J. G. Joung, M. Kang, Y. S. Chung, W. J. Oh, S. Y. Yeom, W. Y. Park, T. J. Kim*, and S. I. Seo*. 2021. Renal Cell Carcinoma-Infiltrating CD3^{low} Vγ9Vδ1 T Cells Represent Potentially Novel Anti-Tumor Immune Players. *Curr Issues Mol Biol* 43: 226-239.
4. Lee, H.-W., H.-W. Lee, C.-H. Park, W.-J. Oh, T.-J. Kim, G.-Y. Kwon, and S.-I. Seo. 2021. Pattern of Tumor-Infiltrating Lymphocytes in Mixed Epithelial and Stromal Tumor of the Kidney: A Review of Five Cases. *Cells* 10: 917.
5. Choi, J. D., T. J. Kim, B. C. Jeong, H. G. Jeon, S. S. Jeon, M. Y. Kang, S. Y. Yeom, and S. I. Seo. 2021. ISL1 promotes enzalutamide resistance in castration-resistant prostate cancer (CRPC) through epithelial to mesenchymal transition (EMT). *Sci Rep* 11: 21984.
6. Choi, S. W., J. Woo, K. S. Park, J. Ko, Y. K. Jeon, S. W. Choi, H. Y. Yoo, I. Kho, T. J. Kim, and S. J.

- Kim. 2021. Higher expression of KCNK10 (TREK-2) K⁺ channels and their functional upregulation by lipopolysaccharide treatment in mouse peritoneal B1a cells. *Pflugers Arch* 473: 659-671.
7. Lee, S., Y. Ko, and T. J. Kim*. 2020. Homeostasis and regulation of autoreactive B cells. *Cell Mol Immunol* 17: 561-569.
8. Lee, H. W., Y. S. Chung, and T. J. Kim*. 2020. Heterogeneity of Human $\gamma\delta$ T Cells and Their Role in Cancer Immunity. *Immune Netw* 20: e5.
9. Liu, W., P. Tolar, W. Song, and T. J. Kim*. 2020. Editorial: BCR Signaling and B Cell Activation. *Front Immunol* 11: 45.
10. Lee, M., C. Park, J. Woo, J. Kim, I. Kho, D.-H. Nam, W.-Y. Park, Y.-S. Kim, D.-S. Kong*, H. W. Lee*, and T. J. Kim*. 2019. Preferential Infiltration of Unique V γ 9J γ 2-V δ 2 T Cells Into Glioblastoma Multiforme. *Front Immunol* 10: 555.
11. Zhao, X., H. Xie, M. Zhao, A. Ahsan, X. Li, F. Wang, J. Yi, Z. Yang, C. Wu, I. Raman, Q.-Z. Li*, T. J. Kim*, and W. Liu*. 2019. Fc receptor-like 1 intrinsically recruits c-Abl to enhance B cell activation and function. *Sci Adv* 5: eaaw0315.
12. Kim, T. J.* 2018. The Role of B Cells in Transplantation Rejection. *J Korean Soc Transplant* 32: 1.
13. Lee, J.-G., J. Y. Jang, T. Fang, Y. Xu, J.-J. Yan, J.-H. Ryu, H. J. Jeon, T. Y. Koo, D. K. Kim, K.-H. Oh, T. J. Kim*, and J. Yang*. 2018. Identification of Human B-1 Helper T Cells With a Th1-Like Memory Phenotype and High Integrin CD49d Expression. *Front Immunol* 9: 1617.
14. Park, C., and T. J. Kim*. 2018. Expansion and Sub-Classification of T Cell-Dependent Antibody Responses to Encompass the Role of Innate-Like T Cells in Antibody Responses. *Immune Netw* 18: e34.
15. Jeon, H. J., K. Kim, J.-G. Lee, J. Y. Jang, S. Choi, T. Fang, J.-J. Yan, M. Han, J. C. Jeong, K.-B. Lee, T. J. Kim, C. Ahn, and J. Yang. 2017. VDJ gene usage among B-cell receptors in ABO-incompatible kidney transplantation determined by RNA-seq Transcriptomic analysis. *BMC Nephrol* 18: 340.
16. Chen, Y., F. Hu, X. Dong, M. Zhao, J. Wang, X. Sun, T. J. Kim*, Z. Li*, and W. Liu*. 2017. SHIP-1 Deficiency in AID(+) B Cells Leads to the Impaired Function of B10 Cells with Spontaneous Autoimmunity. *J Immunol* 199: 3063-3073.
17. Yang, J. I., C. Park, I. Kho, S. Lee, K.-S. Suh, and T. J. Kim*. 2017. Serosal Cavities Contain Two Populations of Innate-like integrin α 4 CD4 T Cells, Integrin α 4 β 1 α 6 β 1 α 4 β 7 and α 4 β 1 α 6 β 1 α 4 β 7 Cells. *Immune Netw* 17: 392-401.
18. Park, C., I. S. Kho, J. In Yang, M. J. Kim, S. Park, H. S. Cha, J. Lee*, and T. J. Kim*. 2017. Positive selection of type II collagen-reactive CD80(high) marginal zone B cells in DBA/1 mice. *Clin Immunol* 178: 64-73.
19. Kim, H., S. K. Lee, X. L. Jin, T. J. Kim, C. Park, J. I. Lee, H. S. Kim, S. K. Hong, K. C. Yoon, S. W. Ahn, K. B. Lee, N. J. Yi, J. Yang, K. W. Lee, W. J. Hawthorne, and K. S. Suh. 2017. Memory T Cells Are Significantly Increased in Rejecting Liver Allografts of Rhesus Monkeys. *Liver Transpl* 24: 256-268.
20. Du, E. J., T. J. Ahn, I. Kwon, J. H. Lee, J.-H. Park, S. H. Park, T. M. Kang, H. Cho, T. J. Kim, H.-W. Kim, Y. Jun, H. J. Lee, Y. S. Lee, J. Y. Kwon, and K. Kang. 2016. TrpA1 Regulates Defecation of Food-Borne Pathogens under the Control of the Duox Pathway. *PLoS Genet* 12: e1005773.
21. Moon, H., C. Park, J. G. Lee, S. H. Shin, J. H. Lee, I. Kho, K. Kang, H. S. Cha, and T. J. Kim*. 2015. Early Development in the Peritoneal Cavity of CD49dhigh Th1 Memory Phenotype CD4⁺ T Cells with Enhanced B Cell Helper Activity. *J Immunol* 195: 564-575.
22. Chung, Y. S., J. K. Son, B. Choi, S.-Y. Joo, Y.-S. Lee, J. B. Park, H. Moon, T. J. Kim, S. H. Kim, S. Hong, J. Chang, M.-S. Kang, and S. J. Kim. 2015. Co-transplantation of human fetal thymus, bone and CD34(+) cells into young adult immunodeficient NOD/SCID IL2R γ (null) mice optimizes humanized mice that mount adaptive antibody responses. *Clin Immunol* 157: 156-165.
23. Kang, B. H., H. S. Min, Y. J. Lee, B. Choi, E. J. Kim, J. Lee, J.-R. Kim, K.-H. Cho, T. J. Kim, K. C. Jung, and S. H. Park. 2015. Analyses of the TCR repertoire of MHC class II-restricted innate CD4⁺ T cells. *Exp Mol Med* 47: e154.