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Harnessing immune regulation for treatment of human diseases : CD4+CD25+ regulatory T cells & antibody glycosylation

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PUBLICATIONS

1. de Greef JC*, **Wang J***, Balog J, den Dunnen JT, Frants RR, Straasheijm KR, Aytakin C, van der Burg A, Duprez L, Ferster A, Gennery AR, Gimelli G, Reisli I, Schuetz C, Schulz A, Smeets DF, Sznajder Y, Wijmenga C, van Ostaijen-ten Dam MM, Lankester AC, van Tol MJ, van den Elsen PJ, Weemaes CM, van der Maarel SM. Loss of function mutations in *ZBTB24* cause immunodeficiency, centromeric instability and facial anomalies (ICF) syndrome type 2. *Submitted*. (* contributed equally)
2. **Wang J**, Balog CI, Stavenhagen K, Koeleman CA, Scherer HU, Deelder AM, Huizinga TW, Toes RE, Wuhler M. Fc-glycosylation of IgG1 is modulated by B cell stimuli. *Mol. Cell. Proteomics*. Revision
3. Zhao Y, Ye D, **Wang J**, Meurs I, Azzis S, Van Berkel TJ, Van Eck M. Stage-specific dynamics of established atherosclerotic lesions in response to dietary lipid lowering. *Am. J. Pathol.* Revision
4. **Wang J**, Han WG, Foks AC, Huizinga TW, Toes RE. Neutralization of IL-4 reverses the nonresponsiveness of CD4⁺ T cells to regulatory T cell induction in non-responder mouse strains. *Mol. Immunol.* 2010; 48: 137-46.
5. Kraaij MD, Savage ND, van der Kooij SW, Koekkoek K, **Wang J**, van den Berg JM, Ottenhoff TH, Kuijpers TW, Holmdahl R, van Kooten C, Gelderman KA. Induction of regulatory T cells by macrophages is dependent on reactive oxygen species production. *Proc. Natl. Acad. Sci. U. S. A.* 2010; 107: 17686-91.
6. Scherer HU, van der Woude D, Ioan-Facsinay A, el Bannoudi H, Trouw LA, **Wang J**, Haupl T, Burmester GR, Deelder AM, Huizinga TW, Wuhler M, Toes RE. Glycan profiling of anti-citrullinated protein antibodies isolated from human serum and synovial fluid. *Arthritis Rheum.* 2010; 62: 1620-9.
7. **Wang J**, Huizinga TW, Toes RE. *De novo* generation and enhanced suppression of human CD4⁺CD25⁺ regulatory T cells by retinoic acid. *J. Immunol.* 2009; 183: 4119-26.
8. Scherer HU, **Wang J**, Toes RE, van der Woude D, Koeleman CA, de Boer AR, Huizinga TW, Deelder AM, Wuhler M. Immunoglobulin 1 (IgG1) Fc-glycosylation profiling of anti-citrullinated peptide antibodies from human serum. *Proteomics Clin. Appl.* 2009; 3: 106-15.
9. Yi HW, Lu XM, Fang F, **Wang J**, Xu Q. Astilbin inhibits the adhesion of T lymphocytes *via* decreasing TNF- α and its associated MMP-9 activity and CD44 expression. *Int. Immunopharmacol.* 2008; 8:1467-74.
10. **Wang J**, van Dongen H, Scherer HU, Huizinga TW, Toes RE. Suppressor activity among CD4⁺CD25⁺⁺ T cells is discriminated by membrane-bound tumor necrosis factor α . *Arthritis Rheum.* 2008; 58:1609-18.
11. **Wang J**, Toes RE. Mechanisms of oral tolerance revisited. *Arthritis Res. Ther.* 2008; 10: 108.
12. **Wang J**, Ioan-Facsinay A, van der Voort EI, Huizinga TW, Toes RE. Transient expression of FOXP3 in human activated nonregulatory CD4⁺ T cells. *Eur. J. Immunol.* 2007; 37:129-38.

13. Zhao Y, Liu JY, **Wang J**, Wang L, Ying H, Tan, RX, Xu, Q. Fumigaclavine C improves concanavalin A-induced liver injury in mice mainly *via* inhibiting TNF- α production and lymphocyte adhesion to extracellular matrices. *J. Pharm. Pharmacol.* 2004; 56: 775-82.
14. **Wang J**, Zhao Y, Xu Q. Astilbin prevents concanavalin A-induced liver injury by reducing TNF- α production and T lymphocyte adhesion. *J. Pharm. Pharmacol.* 2004; 56: 495-502.

