

**RIKARD HOLMDAHL PUBLICATIONS 2011****Peer reviewed articles**

1. Pizzolla A, Gelderman KA, Hultqvist M, Vestberg M, Gustafsson K, Mattsson R, Holmdahl, R. CD68-expressing cells can prime T cells and initiate autoimmune arthritis in the absence of reactive oxygen species. *Eur J Immunol*. 2011 Feb;41(2):403-12.
2. Liu Y, Teige A, Mondoc E, Ibrahim S, Holmdahl R, Issazadeh-Navikas S. Endogenous collagen peptide activation of CD1d-restricted NKT cells ameliorates tissue-specific inflammation in mice. *J Clin Invest*. 2011 Jan 4;121(1):249-64.
3. Hultqvist, M., Sareila, O., Vilhardt, F., Norin, U., Olsson, L. M., Olofsson, P., Hellman, U. and Holmdahl, R., Positioning of a Polymorphic Quantitative Trait Nucleotide in the Ncf1 Gene Controlling Oxidative Burst Response and Arthritis Severity in Rats. *Antioxid Redox Signal* 2011;14(12):2373-83.
4. Andersson IE, Andersson CD, Batsalova T, Dzhambazov B, Holmdahl R, Kihlberg J, Linusson, A.. Design of Glycopeptides Used to Investigate Class II MHC Binding and T-Cell Responses Associated with Autoimmune Arthritis. *PLoS One*. 2011;6(3):e17881.
5. Conigliaro P, Benson R, Patakas A, Kelly SM, Valesini G, Homdahl R, McInnes, I.B. and Garside, P. Characterization of the Anti-Collagen Antibody Response in a new model of chronic polyarthritis *Arthritis Rheum*. 2011; 2011;63(8):2299-308.
6. Bäcklund A, Holmdahl M, Mattsson R, Hakansson K, Lindstrom V, Nandakumar KS, Grubb A, Holmdahl R. Cystatin C influences the autoimmune but not inflammatory response to cartilage type II collagen leading to chronic arthritis development. *Arthritis Res Ther*. 2011 Mar 28;13(2):R54.
7. Ahlqvist, E., Ekman, D., Lindvall, T., Popovic, M., Förster, M., Hultqvist, M., Klaczowska, D., I., T., Johannesson, M., Flint, J., Valdar, W., Nandakumar, K. S. and Holmdahl, R., High resolution mapping of a complex disease, a model for rheumatoid arthritis, using heterogeneous stock mice. *Hum Mol Genet* 2011;20(15):3031-41.
8. Nandakumar KS, Lindqvist A-KB, Holmdahl R. A dominant suppressive MHC class II haplotype interacting with autosomal genes controls autoantibody production and chronicity of arthritis *Ann Rheum Dis*. 2011; 2011;70(9):1664-70.
9. Olsson LM, Nerstedt A, Lindqvist A-K, Johansson Å, Medstrand P, Olofsson P, Holmdahl, R. Copy number variation of the gene NCF1 is associated with Rheumatoid Arthritis. *Antioxid Redox Signal*. 2011 Jul 5.
10. Lindvall T, Nandakumar KS, Yousefi K, Holmdahl R, Andersson A. An encephalomyelitis-specific locus on chromosome 16 in mouse controls disease development and expression of immune-regulatory genes. *J Neuroimmunol*. 2011;235(1-2):40-7.
11. Zhu W, Meng L, Jiang C, He X, Hou W, Xu P, Du H, Holmdahl R, Lu S. Arthritis is associated with T-cell-induced upregulation of Toll-like receptor 3 on synovial fibroblasts. *Arthritis Res Ther* 2011;13(3):R103.
12. Li D, Wang X, Ren W, Ren J, Lan X, Wang F, Zhang HF, Han Y, Song T, Holmdahl

- R, Lu S. High expression of liver histone deacetylase 3 contributes to high-fat-diet-induced metabolic syndrome by suppressing the PPAR-gamma and LXR-alpha-pathways in E3 rats. *Mol Cell Endocrinol* 2011.
13. Jochems C, Islander U, Erlandsson M, Engdahl C, Lagerquist M, Ohlsson C, Nandakumar KS, Holmdahl R, Carlsten H. Effects of oestradiol and raloxifene on the induction and effector phases of experimental postmenopausal arthritis and secondary osteoporosis. *Clin Exp Immunol* 2011;165(1):121-9.
  14. Croxford AM, Nandakumar KS, Holmdahl R, Tobin MJ, McNaughton D, Rowley MJ. Chemical changes demonstrated in cartilage by synchrotron infrared microspectroscopy in an antibody-induced murine model of rheumatoid arthritis. *J Biomed Opt* 2011;16(6):066004.
  15. Andersson IE, Batsalova T, Haag S, Dzhabazov B, Holmdahl R, Kihlberg J, Linusson, A. (E)-Alkene and Ethylene Isosteres Substantially Alter the Hydrogen-Bonding Network in Class II MHC A(q)/Glycopeptide Complexes and Affect T-Cell Recognition. *J Am Chem Soc.* 2011 Jul. 18.
  16. Cao D, Khmaladze I, Jia H, Bajtner E, Nandakumar KS, Blom T, Mo, JA, Holmdahl, R. Pathogenic autoreactive B cells are not negatively selected toward matrix protein collagen II. *J. Immunol.* 2011 Nov. 1;187(9):4451–4458.
  17. Dobritsch D, Lindh I, Uysal H, Nandakumar KS, Burkhardt H, Schneider G, Holmdahl R. Crystal structure of an arthritogenic anticollagen immune complex. *Arthritis Rheum.* 2011 Dec.;63(12):3740–3748.
  18. Shakya AK, Kumar A, Klaczowska D, Hultqvist M, Hagenow K, Holmdahl R, Nandakumar KS. Collagen type II and a thermo-responsive polymer of N-isopropylacrylamide induce arthritis independent of Toll-like receptors: a strong influence by major histocompatibility complex class II and Ncf1 genes. *Am. J. Pathol.* 2011 Nov;179(5):2490–500.

### **Books, book chapters, reviews**

1. Kollias G, Papadaki P, Apparailly F, Vervoordeldonk MJ, Holmdahl R, Baumans V, et al. Animal models for Arthritis: Innovative tools for prevention and therapy. *Ann Rheum Dis.* 2011; 2011;70(8):1357-62.
2. Sareila O, Kelkka T, Pizzolla A, Hultqvist M, Holmdahl R. NOX2 Complex-derived ROS as Immune Regulators. *Antioxid Redox Signal* 2011.
3. Holmdahl R, Malissen B. The need for littermate controls. *Eur. J. Immunol.* 2011 Dec. 29;42(1):45–47.