

5. Literaturverzeichnis

- Aderem A, Underhill DM: Mechanisms of phagocytosis in macrophages.
Annu Rev Immunol 1999;17:593-623
- Adyel FZ, Hentati B, Boulila A, Hachicha J, Ternynck T, Avrameas S, Ayadi H. Characterization of autoantibody activities in sera anti-DNA antibody and circulating immune complexes from 12 systemic lupus erythematosus patients.
J Clin Lab Anal. 1996;10(6):451-7.
- Aigner A, Neumann S: Immunchemie.
Gustav Fischer, 1997
- Altschul SF, Madden TL, Schaffer AA, Zhang J, Zhang Z, Miller W, Lipman DJ.: Gapped BLAST and PSI-BLAST: a new generation of protein database search programs.
Nucleic Acids Res. 1997 Sep 1;25(17):3389-402.
- An WF, Bowlby MR, Betty M, Cao J, Ling HP, Mendoza G, Hinson JW, Mattsson KI, Strassle BW, Trimmer JS, Rhodes KJ.: Modulation of A-type potassium channels by a family of calcium sensors.
Nature. 2000 Feb 3;403(6769):553-6.
- Angenendt P, Glöckler J, Murphy D, Lehrach H, Cahill D: Toward optimized antibody microarrays: a comparison of current microarray support materials.
Anal Biochem 2002 Oct 15;309(2):253-60
- Avrameas S: Natural autoantibodies: from 'horror autotoxicus' to 'gnothi seauton'.
Immunol Today 1991 May;12(5):154-9
- Avrameas S, Dighiero G, Lymberi P, Guilbert B: Studies on natural antibodies and autoantibodies.
Ann Immunol (Paris) 1983 Jul-Aug;134D(1):103-13
- Bachmaier K, Neu N, de la Maza LM, Pal S, Hessel A, Penninger JM.: Chlamydia infections and heart disease linked through antigenic mimicry.
Science 1999 Feb 26;283(5406):1335-9
- Baekkeskov S, Landin M, Kristensen JK, Srikantha S, Bruining GJ, Mandrup-Poulsen T, de Beaufort C, Soeldner JS, Eisenbarth G, Lindgren F, et al.: Antibodies to a 64,000 Mr human islet cell antigen precede the clinical onset of insulin-dependent diabetes.
J Clin Invest 1987 Mar;79(3):926-34
- Banerji J, Sands J, Strominger JL, Spies T.: A gene pair from the human major histocompatibility complex encodes large proline-rich proteins with multiple repeated motifs and a single ubiquitin-like domain.
Proc Natl Acad Sci U S A. 1990 Mar;87(6):2374-8.
- Bendtzen K, Hansen MB, Ross C, Svensson M.: High-avidity autoantibodies to cytokines.
Immunol Today. 1998 May;19(5):209-11.
- Berke SJ, Paulson HL.: Protein aggregation and the ubiquitin proteasome pathway: gaining the UPPer hand on neurodegeneration.
Curr Opin Genet Dev. 2003 Jun;13(3):253-61.

- Bernier-Valentin F, Rabilloud R, Rousset B.: Evidence for anti-tubulin autoantibodies in the form of immune complexes in human sera.
Clin Exp Immunol. 1988 Feb;71(2):261-8.
- Bieche I, Maucuer A, Laurendeau I, Lachkar S, Spano AJ, Frankfurter A, Levy P, Manceau V, Sobel A, Vidaud M, Curmi PA.: Expression of stathmin family genes in human tissues: non-neuronal-restricted expression for SCLIP.
Genomics. 2003 Apr;81(4):400-10.
- Bilinska ZT, Caforio AL, Kusmierczyk-Droszcz BK, Michalak E, Grzybowski J, Goldman JH, Haven AJ, Rydlewska-Sadowska W, McKenna WJ, Ruzyoo W: Increased frequency of organ-specific cardiac antibodies in healthy relatives of patients with dilated cardiomyopathy: evidence for autoimmunity in Polish families.
Clin Cardiol 1996 Oct;19(10):794-8
- Bowles KR, Abraham SE, Brugada R, Zintz C, Comeaux J, Sorajja D, Tsubata S, Li H, Brandon L, Gibbs RA, Scherer SE, Bowles NE, Towbin JA: Construction of a high-resolution physical map of the chromosome 10q22-q23 dilated cardiomyopathy locus and analysis of candidate genes.
Genomics. 2000 Jul 15;67(2):109-27.
- Brocke S, Gijbels K, Allegretta M, Ferber I, Piercy C, Blankenstein T, Martin R, Utz U, Karin N, Mitchell D, Veromaa T, Waisman A, Gaur A, Conlon P, Ling N, Fairchild PJ, Wraith DC, O'Garra A, Fathman CG, Steinman L: Treatment of experimental encephalomyelitis with a peptide analogue of myelin basic protein.
Erratum in: *Nature* 1998 Apr 9;392(6676):630
Nature. 1996 Jan 25;379(6563):343-6.
- Bruggemann M, Williams GT, Bindon CI, Clark MR, Walker MR, Jefferis R, Waldmann H, Neuberger MS.: Comparison of the effector functions of human immunoglobulins using a matched set of chimeric antibodies.
J Exp Med 1987 Nov 1;166(5):1351-61
- Büssow K, Nordhoff E, Lubbert C, Lehrach H, Walter G: A human cDNA library for high-throughput protein expression screening.
Genomics 2000 Apr 1;65(1):1-8
- Büssow K: Arrayed cDNA expression libraries for antibody screening and systematic analysis of gene products.
Dissertation, 1998
- Burnet FM: The Nobel Lectures in Immunology. The Nobel Prize for Physiology or Medicine, 1960. Immunologic recognition of self.
Scand J Immunol 1991 Jan;33(1):3-13
- Caforio AL, Mahon NJ, Tona F, McKenna WJ: Circulating cardiac autoantibodies in dilated cardiomyopathy and myocarditis: pathogenetic and clinical significance.
Eur J Heart Fail 2002 Aug;4(4):411-7
- Caforio AL, Mahon NJ, McKenna WJ: Cardiac autoantibodies to myosin and other heart-specific autoantigens in myocarditis and dilated cardiomyopathy.
Autoimmunity 2001;34(3):199-204

- Caforio AL, Goldman JH, Baig MK, Haven AJ, Dalla Libera L, Keeling PJ, McKenna WJ: Cardiac autoantibodies in dilated cardiomyopathy become undetectable with disease progression. *Heart* 1997 Jan;77(1):62-7
- Caforio AL, Goldman JH, Baig MK, Keeling PJ, Bottazzo GF, McKenna WJ: Organ-specific cardiac autoantibodies in dilated cardiomyopathy--an update. *Eur Heart J.* 1995 Dec;16 Suppl O:68-70.
- Caforio AL, Keeling PJ, Zachara E, Mestroni L, Camerini F, Mann JM, Bottazzo GF, McKenna WJ: Evidence from family studies for autoimmunity in dilated cardiomyopathy. *Lancet* 1994 Sep 17;344(8925):773-7
- Caforio AL, Grazzini M, Mann JM, Keeling PJ, Bottazzo GF, McKenna WJ, Schiaffino S: Identification of alpha- and beta-cardiac myosin heavy chain isoforms as major autoantigens in dilated cardiomyopathy. *Circulation* 1992 May;85(5):1734-42
- Cahill DJ: Protein and antibody arrays and their medical applications. *J Immunol Methods* 2001 Apr;250(1-2):81-91
- CIBIS-II: Reduced costs with bisoprolol treatment for heart failure: an economic analysis of the second Cardiac Insufficiency Bisoprolol Study. *Eur Heart J* 2001 Jun;22(12):1021-31
- Critchfield JM, Racke MK, Zuniga-Pflucker JC, Cannella B, Raine CS, Goverman J, Lenardo MJ: T cell deletion in high antigen dose therapy of autoimmune encephalomyelitis. *Science*. 1994 Feb 25;263(5150):1139-43.
- Dayan CM, Daniels GH.: Chronic autoimmune thyroiditis. *N Engl J Med.* 1996 Jul 11;335(2):99-107.
- Degli-Esposti MA, Abraham LJ, McCann V, Spies T, Christiansen FT, Dawkins RL.: Ancestral haplotypes reveal the role of the central MHC in the immunogenetics of DDM. *Immunogenetics*. 1992;36(6):345-56.
- Delves PJ, Roitt IM: The immune system. First of two parts. *N Engl J Med* 2000 Jul 6;343(1):37-49
- Dörffel WV, Felix SB, Wallukat G, Brehme S, Bestvater K, Hofmann T, Kleber FX, Baumann G, Reinke P: Short-term hemodynamic effects of immunoabsorption in dilated cardiomyopathy. *Circulation* 1997; 95:1994-1997
- Du X, Mora R, Barbieri M, Yoo T.: TUNEL-positive labeling in mouse inner ear caused by tubulin immunization is not apoptosis. *ORL J Otorhinolaryngol Relat Spec.* 2003 Jan-Feb;65(1):17-21.
- Edelman GM.: Antibody structure and molecular immunology. *Science*. 1973 May 25;180(88):830-40.
- Eichbaum QG, Beatty DW, Parker MI.: Identification of cardiac autoantigens in human heart cDNA libraries using acute rheumatic fever sera. *J Autoimmun* 1994 Apr;7(2):243-61

Elder RT, Song XQ, Chen M, Hopkins KM, Lieberman HB, Zhao Y.: Involvement of rhp23, a Schizosaccharomyces pombe homolog of the human HHR23A and Saccharomyces cerevisiae RAD23 nucleotide excision repair genes, in cell cycle control and protein ubiquitination.
Nucleic Acids Res. 2002 Jan 15;30(2):581-91.

Felix SB, Staudt A, Landsberger M, Grosse Y, Stangl V, Spielhagen T, Wallukat G, Wernecke KD, Baumann G, Stangl K. Removal of cardiodepressant antibodies in dilated cardiomyopathy by immunoabsorption.
J Am Coll Cardiol 2002 Feb 20;39(4):646-52

Felix SB, Staudt A, Dörffel WV, Stangl V, Merkel K, Pohl M, Docke WD, Morgera S, Neumayer HH, Wernecke KD, Wallukat G, Stangl K, Baumann G.: Hemodynamic effects of immunoabsorption and subsequent immunoglobulin substitution in dilated cardiomyopathy: three-month results from a randomized study.
J Am Coll Cardiol 2000 May;35(6):1590-8

Fu MLX, Hoebeke J, Matsui S, Matoba M, Magnusson Y, Hedner T, Herlitz H, Hjalmarson A: Autoantibodies against cardiac G-protein-coupled-receptors define different populations with cardiomyopathies but not with hypertension.
Clin Immunol Immunopath 1994;72:15-20

Fu MLX, Schulze W, Wallukat G, Hjalmarson A, Hoebeke J: A synthetic peptide corresponding to the second extracellular loop of the human M₂ acetylcholin receptor induces pharmacological and morphological changes in cardiomyocytes by active immunization after 6 months in rabbits.
Clin Immunol Immunopathol 1996; 78:203-207

Fukuda-Kamitani T, Kamitani T.: Ubiquitination of Ro52 autoantigen.
Biochem Biophys Res Commun. 2002 Jul 26;295(4):774-8.

Garcia KC, Degano M, Speir JA, Wilson IA: Emerging principles for T cell receptor recognition of antigen in cellular immunity.
Rev Immunogenet 1999;1(1):75-90

Grabar P.: Hypothesis. Auto-antibodies and immunological theories: an analytical review.
Clin Immunol Immunopathol. 1975 Nov;4(4):453-66.

Graninger M, Schmaldienst S, Derfler K, Graninger WB.: Immunoabsorption therapy (therasorb) in patients with severe lupus erythematosus.
Acta Med Austriaca. 2002;29(1):26-9.

Grzeskowiak R, Witt H, Drungowski M, Thermann R, Hennig S, Perrot A, Osterziel KJ, Klingbiel D, Scheid S, Spang R, Lehrach H, Ruiz P.: Expression profiling of human idiopathic dilated cardiomyopathy.
Cardiovasc Res. 2003 Aug 1;59(2):400-11.

Guerder S, Meyerhoff J, Flavell R.: The role of the T cell costimulator B7-1 in autoimmunity and the induction and maintenance of tolerance to peripheral antigen.
Immunity 1994 May;1(2):155-66

Haab BB: Advances in protein microarray technology for protein expression and interaction profiling.
Curr Opin Drug Discov Devel 2001 Jan;4(1):116-23

- Haab BB, Dunham MJ, Brown PO.: Protein microarrays for highly parallel detection and quantitation of specific proteins and antibodies in complex solutions.
Genome Biol. 2001;2(2):RESEARCH0004. Epub 2001 Jan 22.
- Hadji-Ghasemi F, Gharagozlou S, Ghods R, Roohi A, Khoshnoodi J, Shokri F.: Generation and Characterization of a Mouse Monoclonal Antibody with Specificity Similar to Staphylococcal Protein A (SPA).
Hybrid Hybridomics 2003 Feb;22(1):33-9
- Hammerling GJ, Schonrich G, Ferber I, Arnold B.: Peripheral tolerance as a multi-step mechanism.
Immunol Rev. 1993 Jun;133:93-104.
- Harcombe AA, Sharples L, Large SR, Wallwork J, Weissberg PL, Joysey V: HLA antigen frequencies in end-stage idiopathic and ischaemic cardiomyopathy.
Int J Cardiol 1999 Jan;68(1):31-7
- Haunstetter A, Izumo S.: Apoptosis: basic mechanisms and implications for cardiovascular disease.
Circ Res. 1998 Jun 15;82(11):1111-29.
- Hay FC, Nineham LJ, Torrigiani G, Roitt IM.: Hidden' IgG antiglobulins in normal human serum.
Clin Exp Immunol. 1976 Aug;25(2):185-90.
- Holt LJ, Enever C, de Wildt RM, Tomlinson IM.: The use of recombinant antibodies in proteomics.
Curr Opin Biotechnol. 2000 Oct;11(5):445-9.
- Holz C, Hesse O, Bolotina N, Stahl U, Lang C: A micro-scale process for high-throughput expression of cDNAs in the yeast *Saccharomyces cerevisiae*.
Protein Expr Purif 2002 Aug;25(3):372-8
- Hoogenboom HR, de Bruine AP, Hufton SE, Hoet RM, Arends JW, Roovers RC.: Antibody phage display technology and its applications.
Immunotechnology. 1998 Jun;4(1):1-20.
- Hoogenboom HR, Griffiths AD, Johnson KS, Chiswell DJ, Hudson P, Winter G: Multi-subunit proteins on the surface of filamentous phage: methodologies for displaying antibody (Fab) heavy and light chains.
Nucleic Acids Res 1991 Aug 11;19(15):4133-7
- Horne MC, Goolsby GL, Donaldson KL, Tran D, Neubauer M, Wahl AF.: Cyclin G1 and cyclin G2 comprise a new family of cyclins with contrasting tissue-specific and cell cycle-regulated expression.
J Biol Chem. 1996 Mar 15;271(11):6050-61.
- Hsu HC, Matsuki Y, Zhang HG, Zhou T, Mountz JD.: The Fas signaling connection between autoimmunity and embryonic lethality.
J Clin Immunol. 2001 Jan;21(1):1-14.
- Hutchison CJ, Alvarez-Reyes M, Vaughan OA: Lamins in disease: why do ubiquitously expressed nuclear envelope proteins give rise to tissue-specific disease phenotypes?
J Cell Sci. 2001 Jan;114(Pt 1):9-19.

- Jahns R, Boivin V, Siegmund C, Boege F, Lohse MJ, Inselmann G: Activating beta-1-adrenoceptor antibodies are not associated with cardiomyopathies secondary to valvular or hypertensive heart disease.
J Am Coll Cardiol 1999 Nov 1;34(5):1545-51
- Janeway CA und Travers P: Immunologie. 2. Auflage.
Spektrum Akademischer Verlag Heidelberg, Berlin, Oxford, 1997
- Jenkins MK, Pardoll DM, Mizuguchi J, Chused TM, Schwartz RH
Molecular events in the induction of a nonresponsive state in interleukin 2-producing helper T-lymphocyte clones.
Proc Natl Acad Sci U S A 1987 Aug;84(15):5409-13
- Joos TO, Schrenk M, Hopfl P, Kroger K, Chowdhury U, Stoll D, Schorner D, Durr M, Herick K, RuppS, Sohn K, Hammerle H: A microarray enzyme-linked immunosorbent assay for autoimmune diagnostics.
Electrophoresis 2000 Jul;21(13):2641-50
- Kamisago M, Sharma SD, DePalma SR, Solomon S, Sharma P, McDonough B, Smoot L, Mullen MP, Woolf PK, Wigle ED, Seidman JG, Seidman CE: Mutations in sarcomere protein genes as a cause of dilated cardiomyopathy.
Comment in: Rev Cardiovasc Med. 2001 Spring;2(2):103-4.
N Engl J Med. 2000 Dec 7;343(23):1688-96.
- Kay MM.: Mechanism of removal of senescent cells by human macrophages in situ.
Proc Natl Acad Sci U S A. 1975 Sep;72(9):3521-5.
- Killary AM, Wolf ME, Giambernardi TA, Naylor SL.: Definition of a tumor suppressor locus within human chromosome 3p21-p22.
Proc Natl Acad Sci U S A. 1992 Nov 15;89(22):10877-81.
- Kim PK, Dutra AS, Chandrasekharappa SC, Puck JM.: Genomic structure and mapping of human FADD, an intracellular mediator of lymphocyte apoptosis.
J Immunol. 1996 Dec 15;157(12):5461-6.
- Kimura SH, Nojima H.: Cyclin G1 associates with MDM2 and regulates accumulation and degradation of p53 protein.
Genes Cells. 2002 Aug;7(8):869-80.
- Kinet JP: The high-affinity IgE receptor (Fc epsilon RI): from physiology to pathology.
Annu Rev Immunol. 1999;17:931-72.
- Klappacher G, Mundigler G, Papousek A, Pacher R, Woloszczuk W, Ullrich R, Buxbaum P, Glogar D: Elevated circulating levels of beta 2-microglobulin in patients with idiopathic dilated cardiomyopathy.
Am J Cardiol 1993 Jan 1;71(1):119-22
- Knappik A, Ge L, Honegger A, Pack P, Fischer M, Wellnhofer G, Hoess A, Wolle J, Pluckthun A, Virnekaus B.: Fully synthetic human combinatorial antibody libraries (HuCAL) based on modular consensus frameworks and CDRs randomized with trinucleotides.
J Mol Biol. 2000 Feb 11;296(1):57-86.

- Knippers R.: Molekulare Genetik
7. Auflage, 1997, Georg Thieme Verlag, Stuttgart-New York
- Kubota T, Miyagishima M, Frye CS, Alber SM, Bounoutas GS, Kadokami T, Watkins SC, McTiernan CF, Feldman AM.: Overexpression of tumor necrosis factor- alpha activates both anti- and pro-apoptotic pathways in the myocardium.
J Mol Cell Cardiol. 2001 Jul;33(7):1331-44.
- Kubota T, McTiernan CF, Frye CS, Slawson SE, Lemster BH, Koretsky AP, Demetris AJ, Feldman AM.: Dilated cardiomyopathy in transgenic mice with cardiac-specific overexpression of tumor necrosis factor-alpha.
Circ Res. 1997 Oct;81(4):627-35.
- Kühl U, Noutsias M, Seeberg B, Schultheiss HP: Immunohistological evidence for a chronic intramyocardial inflammatory process in dilated cardiomyopathy.
Heart. 1996 Mar;75(3):295-300.
- Kukar T, Eckenrode S, Gu Y, Lian W, Megginson M, She JX, Wu D: Protein microarrays to detect protein-protein interactions using red and green fluorescent proteins.
Anal Biochem 2002 Jul 1;306(1):50-4
- Kuo HC, Cheng CF, Clark RB, Lin JJ, Lin JL, Hoshijima M, Nguyen-Tran VT, Gu Y, Ikeda Y, Chu PH, Ross J, Giles WR, Chien KR.: A defect in the Kv channel-interacting protein 2 (KChIP2) gene leads to a complete loss of I(to) and confers susceptibility to ventricular tachycardia.
Cell. 2001 Dec 14;107(6):801-13.
- Lacroix-Desmazes S, Mouthon L, Kaveri SV, Kazatchkine MD, Weksler ME.: Stability of natural self-reactive antibody repertoires during aging.
J Clin Immunol. 1999 Jan;19(1):26-34.
- Lacroix-Desmazes S, Kaveri SV, Mouthon L, Ayouba A, Malanchere E, Coutinho A, Kazatchkine MD.: Self-reactive antibodies (natural autoantibodies) in healthy individuals.
J Immunol Methods. 1998 Jul 1;216(1-2):117-37.
- Lacroix-Desmazes S, Mouthon L, Coutinho A, Kazatchkine MD.: Analysis of the natural human IgG antibody repertoire: life-long stability of reactivities towards self antigens contrasts with age-dependent diversification of reactivities against bacterial antigens.
Eur J Immunol. 1995 Sep;25(9):2598-604.
- Latif N, Baker CS, Dunn MJ, Rose ML, Brady P, Yacoub MH: Frequency and specificity of antiheart antibodies in patients with dilated cardiomyopathy detected using SDS-PAGE and western blotting.
J Am Coll Cardiol 1993 Nov 1;22(5):1378-84
- Lenschow DJ, Walunas TL, Bluestone JA: CD28/B7 system of T cell costimulation.
Annu Rev Immunol 1996;14:233-58
- Leslie RD, Atkinson MA, Notkins AL.: Autoantigens IA-2 and GAD in Type I (insulin-dependent) diabetes.
Diabetologia. 1999 Jan;42(1):3-14.

- Lewis JD, Tollervey D.: Like attracts like: getting RNA processing together in the nucleus.
Science. 2000 May 26;288(5470):1385-9.
- Liao YH: Functional analysis of autoantibodies against ADP/ATP carrier from dilated cardiomyopathy.
Int J Cardiol 1996 May;54(2):165-9
- Liao L, Sindhwan R, Rojkind M, Factor S, Leinwand L, Diamond B: Antibody-mediated autoimmune myocarditis depends on genetically determined target organ sensitivity.
J Exp Med 1995 Mar 1;181(3):1123-31
- Limas CJ, Goldenberg IF, Limas C: Autoantibodies against beta-adrenoceptors in human idiopathic dilated cardiomyopathy.
Circ Res 1989 Jan;64(1):97-103
- Limas CJ: Cardiac autoantibodies in dilated cardiomyopathy: A pathogenetic role?
Circulation 1997 Apr 15;95(8):1979-80
- Limas CJ, Goldenberg IF, Limas C: Soluble interleukin-2 receptor levels in patients with dilated cardiomyopathy. Correlation with disease severity and cardiac autoantibodies.
Circulation 1995 Feb 1;91(3):631-4
- Limas CJ: The immunobiology of dilated cardiomyopathy.
Heart failure 1995: 152-156
- Limas CJ, Goldenberg IF, Limas C: Effect of cardiac transplantation on anti-beta-receptor antibodies in idiopathic dilated cardiomyopathy.
Am J Cardiol 1989 May 1;63(15):1134-7
- Liu B, Huang L, Sihlbom C, Burlingame A, Marks JD: Towards proteome-wide production of monoclonal antibody by phage display.
J Mol Biol. 2002 Feb 1;315(5):1063-73.
- Liu B, Marks JD.: Applying phage antibodies to proteomics: selecting single chain Fv antibodies to antigens blotted on nitrocellulose.
Anal Biochem. 2000 Nov 1;286(1):119-28.
- Lopez MF, Pluskal MG.: Protein micro- and macroarrays: digitizing the proteome.
J Chromatogr B Analyt Technol Biomed Life Sci. 2003 Apr 5;787(1):19-27.
- Lu J, Sloan SR: An alternating selection strategy for cloning phage display antibodies.
J Immunol Methods 1999 Aug 31;228(1-2):109-19
- Lueking A, Horn S, Lehrach H, Cahill DJ.: A dual-expression vector allowing expression in E. coli and P. pastoris, including new modifications.
Methods Mol Biol. 2003;205:31-42. Related Articles, Links
- Lueking A, Holz C, Gotthold C, Lehrach H, Cahill DJ: A system for dual protein expression in Pichia pastoris and Escherichia coli.
Protein Expr Purif 2000 Dec;20(3):372-8
- Lueking A, Horn M, Eickhoff H, Bussow K, Lehrach H, Walter G: Protein microarrays for gene expression and antibody screening.
Anal Biochem 1999 May 15;270(1):103-11

Lum G, Gambino SR.: A comparison of serum versus heparinized plasma for routine chemistry tests.
Am J Clin Pathol. 1974 Jan;61(1):108-13.

MacBeath G, Schreiber SL: Printing proteins as microarrays for high-throughput function determination.
Science 2000 Sep 8;289(5485):1760-3

Mackay IR: Science, medicine, and the future: Tolerance and autoimmunity.
Erratum in:
BMJ 2000 Sep 23;321(7263):733.
BMJ. 2000 Jul 8;321(7253):93-6.

Maeyama T, Kuwano K, Kawasaki M, Kunitake R, Hagimoto N, Matsuba T, Yoshimi M, Inoshima I, Yoshida K, Hara N.: Upregulation of Fas-signalling molecules in lung epithelial cells from patients with idiopathic pulmonary fibrosis.
Eur Respir J. 2001 Feb;17(2):180-9.

Maisch B, Funcker R, Alter P, Portig I, Pankuweit S.: [Dilated cardiomyopathy and myocarditis. Current diagnostic requirements and therapeutic possibilities]
Internist (Berl). 2002 Apr;43 Suppl 1:S45-6, S49-65.

Maisch B, Bauer E, Herzum M, Hufnagel G, Izumi T, Numoda S, Schönian U: Humoral and cell-mediated immunity: pathogenetic mechanisms in dilated cardiomyopathy.
Baroldi G, Cameri F, Goodwin JF (Hrsg) Advances in cardiomyopathies, Springer, Berlin Heidelberg New York Tokio, S209-220

Maisch B, Hufnagel G, Schönian U, Hengstenberg C: The european study of epidemiology and treatment of cardiac inflammatory disease (ESETCID) 1995.
Eur Heart J 1995 Dec; 16 Suppl O: 173-175

Mak TW, Yeh WC.: Signaling for survival and apoptosis in the immune system.
Arthritis Res. 2002;4 Suppl 3:S243-52. Epub 2002 May 09.

Mandi Y, Hogye M, Talha EM, Skolak E, Csanady M.: Cytokine production and antibodies against heat shock protein 60 in cardiomyopathies of different origins.
Pathobiology. 2000 May-Jun;68(3):150-8. Related Articles, Links

Manchen ST, Hubberstey AV.: Human Scythe contains a functional nuclear localization sequence and remains in the nucleus during staurosporine-induced apoptosis.
Biochem Biophys Res Commun. 2001 Oct 12;287(5):1075-82.

Manser T, Gefter ML: The molecular evolution of the immune response: idiotope-specific suppression indicates that B cells express germ-line-encoded V genes prior to antigenic stimulation.
Eur J Immunol. 1986 Nov;16(11):1439-44.

Marchalonis JJ, Kaveri S, Lacroix-Desmazes S, Kazatchkine MD.: Natural recognition repertoire and the evolutionary emergence of the combinatorial immune system.
FASEB J. 2002 Jun;16(8):842-8.

Marks JD, Hoogenboom HR, Griffiths AD, Winter G.: Molecular evolution of proteins on filamentous phage. Mimicking the strategy of the immune system.
J Biol Chem. 1992 Aug 15;267(23):16007-10.

Matsui S, Fu ML, Katsuda S, Hayase M, Yamaguchi N, Teraoka K, Kurihara T, Takekoshi N, Murakami E, Hoebeke J, Hjalmarson A.: Peptides derived from cardiovascular G-protein-coupled receptors induce morphological cardiomyopathic changes in immunized rabbits. *J Mol Cell Cardiol* 1997 Feb;29(2):641-55

Matzinger P: Immunology. Memories are made of this? *Nature* 1994 Jun 23;369(6482):605-6

Mead DA, Kemper B: Chimeric single-stranded DNA phage-plasmid cloning vectors. *Biotechnology* 1988;10:85-102

McCafferty J, Griffiths AD, Winter G, Chiswell DJ.: Phage antibodies: filamentous phage displaying antibody variable domains. *Nature*. 1990 Dec 6;348(6301):552-4.

McGuinness BT, Walter G, FitzGerald K, Schuler P, Mahoney W, Duncan AR, Hoogenboom HR.: Phage diabody repertoires for selection of large numbers of bispecific antibody fragments. *Nat Biotechnol*. 1996 Sep;14(9):1149-54.

Mead DA, Kemper B.: Chimeric single-stranded DNA phage-plasmid cloning vectors. *Biotechnology*. 1988;10:85-102.

MERIT-HF Metoprolol CR/XL Randomised Intervention Trial in Congestive Heart Failure Effect of metoprolol CR/XL in chronic heart failure. *Lancet* 1999 Jun 12;353(9169):2001-7

Michel C, Gonzalez R, Bonjour E, Avrameas S.: A concurrent increasing of natural antibodies and enhancement of resistance to furunculosis in rainbow trout. *Ann Rech Vet*. 1990;21(3):211-8. Related Articles, Links

Michels VV, Moll PP, Miller FA, Tajik AJ, Chu JS, Driscoll DJ, Burnett: The frequency of familial dilated cardiomyopathy in a series of patients with idiopathic dilated cardiomyopathy. *N Engl J Med* 1992 Jan 9;326(2):77-82

Mouthon L, Lacroix-Desmazes S, Nobrega A, Barreau C, Coutinho A, Kazatchkine MD.: The self-reactive antibody repertoire of normal human serum IgM is acquired in early childhood and remains conserved throughout life. *Scand J Immunol*. 1996 Sep;44(3):243-51.

Mouthon L, Haury M, Lacroix-Desmazes S, Barreau C, Coutinho A, Kazatchkine MD.: Analysis of the normal human IgG antibody repertoire. Evidence that IgG autoantibodies of healthy adults recognize a limited and conserved set of protein antigens in homologous tissues. *J Immunol*. 1995 Jun 1;154(11):5769-78.

Mueller TD, Feigon J.: Solution structures of UBA domains reveal a conserved hydrophobic surface for protein-protein interactions. *J Mol Biol*. 2002 Jun 21;319(5):1243-55.

Naparstek Y, Schwartz RS, Eliakim M: [Autoantibodies: part of the normal preimmune repertoire] *Harefuah* 1986 Nov 16;111(10):312-3

Narula J, Kolodgie FD, Virmani R.: Apoptosis and cardiomyopathy. *Curr Opin Cardiol*. 2000 May;15(3):183-8.

Narula J, Haider N, Virmani R, DiSalvo TG, Kolodgie FD, Hajjar RJ, Schmidt U, Semigran MJ, Dec GW, Khaw BA.: Apoptosis in myocytes in end-stage heart failure.
N Engl J Med. 1996 Oct 17;335(16):1182-9.

Comment in:

N Engl J Med. 1996 Oct 17;335(16):1224-6.

N Engl J Med. 1997 Apr 3;336(14):1025-6; discussion 1026.

Neu N, Beisel KW, Traystman MD, Rose NR, Craig SW: Autoantibodies specific for the cardiac myosin isoform are found in mice susceptible to Coxsackievirus B3-induced myocarditis.
J Immunol 1987 Apr 15;138(8):2488-92

Nissim A, Hoogenboom HR, Tomlinson IM, Flynn G, Midgley C, Lane D, Winter G: Antibody fragments from a 'single pot' phage display library as immunochemical reagents.
EMBO J 1994 Feb 1;13(3):692-8

Nogales E, Wolf SG, Downing KH.: Structure of the alpha beta tubulin dimer by electron crystallography.
Nature. 1998 Jan 8;391(6663):199-203.

Ohashi PS, Oehen S, Buerki K, Pircher H, Ohashi CT, Odermatt B, Malissen B, Zinkernagel RM, Hengartner H: Ablation of "tolerance" and induction of diabetes by virus infection in viral antigen transgenic mice.
Cell 1991 Apr 19;65(2):305-17

Oldstone MBA: Molecular mimicry and immune-mediated disease.
FASEB J 1998;12:1255-65

Olivetti G, Cigola E, Maestri R, Lagrasta C, Quaini F.: The Failing Heart.
Adv Clin Path. 1997 Apr;1(2):137-148.

Ozaki T, Hanaoka E, Naka M, Nakagawara A, Sakiyama S.: Cloning and characterization of rat BAT3 cDNA.
DNA Cell Biol. 1999 Jun;18(6):503-12.

Pandey A, Mann M: Proteomics to study genes and genomes.
Nature 2000 Jun 15;405(6788):837-46

Pankuweit S, Portig I, Eckhardt H, Crombach M, Hufnagel G, Maisch B.: Prevalence of viral genome in endomyocardial biopsies from patients with inflammatory heart muscle disease.
Herz 2000 May;25(3):221-6

Pashov A, Kenderov A, Kyurkchiev S, Kehayov I, Hristova S, Lacroix-Desmazes S, Giltay N, Varamballi S, Kazatchkine MD, Kaveri SV.: Autoantibodies to heat shock protein 90 in the human natural antibody repertoire.
Int Immunol. 2002 May;14(5):453-61.

Pauschinger M, Bowles NE, Fuentes-Garcia FJ, Pham V, Kuhl U, Schwimmbeck PL, Schultheiss HP, Towbin JA: Detection of adenoviral genome in the myocardium of adult patients with idiopathic left ventricular dysfunction: Dilated cardiomyopathy is associated with significant changes in collagen type I/III ratio.
Circulation. 1999 Jun 1;99(21):2750-6.

- Peukert S, Fu ML, Eftekhari P, Poepping I, Voss A, Thalhammer C, Hempel A, Menz M, Dietz R, Osterziel KJ: The frequency of occurrence of anti-cardiac receptor autoantibodies and their correlation with clinical manifestation in patients with hypertrophic cardiomyopathy. *Autoimmunity* 1999;29(4):291-7
- Pini A, Viti F, Santucci A, Carnemolla B, Zardi L, Neri P, Neri D.: Design and use of a phage display library. Human antibodies with subnanomolar affinity against a marker of angiogenesis eluted from a two-dimensional gel. *J Biol Chem.* 1998 Aug 21;273(34):21769-76.
- Pohlner K, Portig I, Pankweit S, Lottspeich F, Maisch B.: Identification of mitochondrial antigens recognized by antibodies in sera of patients with idiopathic dilated cardiomyopathy by two-dimensional gel electrophoresis and protein sequencing. *Am J Cardiol* 1997 Oct 15;80(8):1040-5
- Porter M, Black C: Bone marrow transplantation for autoimmune disease. *BMJ* 1999;318:750-1
- Porter RR.: Structural studies of immunoglobulins. *Science.* 1973 May 18;180(87):713-6.
- Pourrier M, Schram G, Nattel S.: Properties, expression and potential roles of cardiac K⁺ channel accessory subunits: MinK, MiRPs, KChIP, and KChAP. *J Membr Biol.* 2003 Aug 1;194(3):141-52.
- Prophet H, Matic GB, Winkler RE, Tiess M, Schneidewind JM, Hebestreit G, Michelsen A, Ramlow W.: Two cases of refractory endocrine ophthalmopathy successfully treated with extracorporeal immunoabsorption. *Ther Apher.* 2001 Apr;5(2):142-6.
- Radbruch A, Recktenwald D: Detection and isolation of rare cells. *Curr Opin Immunol.* 1995 Apr;7(2):270-3.
- Richardson P, McKenna W, Bristow M, Maisch B, Mautner B, O'Connell J, Olsen E, Thiene G, Goodwin J, Gyarfas I, Martin I, Nordet P: Report of the 1995 World Health Organization/International Society and Federation of Cardiology Task Force on the Definition and Classification of cardiomyopathies.
- Robinson WH, DiGennaro C, Hueber W, Haab BB, Kamachi M, Dean EJ, Fournel S, Fong D, Genovese MC, de Vegvar HE, Skriner K, Hirschberg DL, Morris RI, Muller S, Pruijn GJ, van Venrooij WJ, Smolen JS, Brown PO, Steinman L, Utz PJ: Autoantigen microarrays for multiplex characterization of autoantibody responses. *Nat Med* 2002 Mar;8(3):295-301
- Rocken M, Urban JF, Shevach EM: Infection breaks T-cell tolerance. *Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland 20892.* *Nature* 1992 Sep 3;359(6390):79-82
- Rolink A, Melchers F.: Generation and regeneration of cells of the B-lymphocyte lineage. *Curr Opin Immunol.* 1993 Apr;5(2):207-17.

- Rosati B, Pan Z, Lypen S, Wang HS, Cohen I, Dixon JE, McKinnon D.: Regulation of KChIP2 potassium channel beta subunit gene expression underlies the gradient of transient outward current in canine and human ventricle.
J Physiol. 2001 May 15;533(Pt 1):119-25.
- Rosenfeld MR, Eichen JG, Wade DF, Posner JB, Dalmau J.: Molecular and clinical diversity in paraneoplastic immunity to Ma proteins.
Ann Neurol. 2001 Sep;50(3):339-48.
- Rousset B, Bernier-Valentin F, Poncet C, Orgiazzi J, Madec AM, Monier JC, Mornex R.: Anti-tubulin antibodies in autoimmune thyroid disorders.
Clin Exp Immunol. 1983 May;52(2):325-32.
- Sadlack B, Merz H, Schorle H, Schimpl A, Feller AC, Horak I: Ulcerative colitis-like disease in mice with a disrupted interleukin-2 gene.
Cell 1993 Oct 22;75(2):253-61
- Sasso EH, Merrill C, Furst TE: Immunoglobulin binding properties of the ProsoRba immunoadsorption column in treatment of rheumatoid arthritis.
Ther Apher 2001 Apr;5(2):84-91
- Schafler AE, Kirmanoglou K, Gallmeier U, Pecher P, Hannekum A, Schumacher B.: Heat shock protein 60 expression in patients undergoing cardiac operations.
J Cardiovasc Surg (Torino). 2003 Apr;44(2):187-90.
- Schultheiss HP, Schulze K, Schauer R, Witzenbichler B, Strauer BE: Antibody-mediated imbalance of myocardial energy metabolism. A causal factor of cardiac function?
Cir Res 1993; 76:64-72
- Schultheiss HP, Schulze K, Kuhl U, Ulrich G, Klingenberg M.: The ADP/ATP carrier as a mitochondrial auto-antigen--facts and perspectives.
Ann N Y Acad Sci 1986;488:44-64
- Schulze K, Becker BF, Schauer R, Schultheiss HP: Antibodies to ADP-ATP carrier--an autoantigen in myocarditis and dilated cardiomyopathy--impair cardiac function.
Circulation 1990 Mar;81(3):959-69
- Schwimmbeck PL, Badorff C, Rohn G, Schulze K, Schultheiss HP.: The role of sensitized T-cells in myocarditis and dilated cardiomyopathy.
Int J Cardiol. 1996 May;54(2):117-25.
- Schwimmbeck PL, Badorff C, Rohn G, Schulze K, Schultheiss HP: Impairment of left ventricular function in combined immune deficiency mice after transfer of peripheral blood leukocytes from patients with myocarditis.
Eur Heart J 1995 Dec;16 Suppl O:59-63
- Schwinger RH, Hoischen S, Reuter H, Hullin R.: Regional expression and functional characterization of the L-type Ca²⁺-channel in myocardium from patients with end-stage heart failure and in non-failing human hearts.
J Mol Cell Cardiol. 1999 Jan;31(1):283-96.

- Seidel DK, Geiss HC, Donner MG, Ritter MM, Schwandt P, Koll RA, Standl E, Ziegler AG.: Course of islet autoantibody titers during Ig-immunoabsorption in a patient with newly diagnosed type 1 diabetes.
J Autoimmun. 1998 Jun;11(3):273-7.
- Seidman JG, Seidman C.: The genetic basis for cardiomyopathy: from mutation identification to mechanistic paradigms.
Cell. 2001 Feb 23;104(4):557-67.
- Serreze DV, Leiter EH.: Tracking autoimmune T cells in diabetes.
J Clin Invest. 2003 Sep;112(6):826-8.
- Sheets MD, Amersdorfer P, Finnern R, Sargent P, Lindquist E, Schier R, Hemingsen G, Wong C, Gerhart JC, Marks JD, Lindqvist E: Efficient construction of a large nonimmune phage antibody library: the production of high-affinity human single-chain antibodies to protein antigens.
Erratum in: *Proc Natl Acad Sci U S A* 1999 Jan 19;96(2):795. Lindqvist E[corrected to Lindquist E]
Proc Natl Acad Sci U S A. 1998 May 26;95(11):6157-62.
- Shisheva A, Sudhof TC, Czech MP.: Cloning, characterization, and expression of a novel GDP dissociation inhibitor isoform from skeletal muscle.
Mol Cell Biol. 1994 May;14(5):3459-68.
- Sidhu SS.: Engineering M13 for phage display.
Biomol Eng. 2001 Sep;18(2):57-63.
- Sinagra G, Di Lenarda A, Brodsky GL, Taylor MR, Muntoni F, Pinamonti B, Carniel E, Driussi M, Bristow MR, Mestroni L; Heart Muscle Disease Study Group: Current perspective new insights into the molecular basis of familial dilated cardiomyopathy.
 Ital Heart J. 2001 Apr;2(4):280-6.
- Soumillion P, Jespers L, Bouchet M, Marchand-Brynaert J, Sartiaux P, Fastrez J: Phage display of enzymes and in vitro selection for catalytic activity.
Appl Biochem Biotechnol 1994 May-Jun;47(2-3):175-89; discussion 189-90
- Stangl V, Dschietzig T, Bramlage P, Boye P, Kinkel HT, Staudt A, Baumann G, Felix SB, Stangl K: Adrenomedullin and myocardial contractility in the rat.
Eur J Pharmacol 2000 Nov 10;408(1):83-9
- Staudt A, Bohm M, Knebel F, Grosse Y, Bischoff C, Hummel A, Dahm JB, Borges A, Jochmann N, Wernecke KD, Wallukat G, Baumann G, Felix SB.: Potential role of autoantibodies belonging to the immunoglobulin G-3 subclass in cardiac dysfunction among patients with dilated cardiomyopathy.
Circulation. 2002 Nov 5;106(19):2448-53.
- Staudt A, Schaper F, Stangl V, Plagemann A, Bohm M, Merkel K, Wallukat G, Wernecke KD, Stangl K, Baumann G, Felix SB: Immunohistological changes in dilated cardiomyopathy induced by immunoabsorption therapy and subsequent immunoglobulin substitution.
Circulation 2001 Jun 5;103(22):2681-6
- Staudt Y, Mobini R, Fu M, Felix SB, Kuhn JP, Staudt A.: Beta1-adrenoceptor antibodies induce apoptosis in adult isolated cardiomyocytes.
Eur J Pharmacol. 2003 Apr 11;466(1-2):1-6.

- Stausbol-Gron B, Jensen KB, Jensen KH, Jensen MO, Clark BF.: De novo identification of cell-type specific antibody-antigen pairs by phage display subtraction. Isolation of a human single chain antibody fragment against human keratin 14.
Eur J Biochem. 2001 May;268(10):3099-107.
- Strachan G, McElhiney J, Drever MR, McIntosh F, Lawton LA, Porter AJ: Rapid selection of anti-hapten antibodies isolated from synthetic and semi-synthetic antibody phage display libraries expressed in Escherichia coli.
FEMS Microbiol Lett 2002 May 7;210(2):257-61
- Strasser A, Newton K.: FADD/MORT1, a signal transducer that can promote cell death or cell growth.
Int J Biochem Cell Biol. 1999 May;31(5):533-7.
- Torfason EG, Reimer CB, Keyserling HL.: Subclass restriction of human enterovirus antibodies.
J Clin Microbiol 1987 Aug;25(8):1376-9
- Towbin, JA, Bowles, NE: Molecular genetics of left ventricular dysfunction.
Curr Mol Med 2001 Mar 1(1):81-90
- Unwin RD, Harnden P, Pappin D, Rahman D, Whelan P, Craven RA, Selby PJ, Banks RE.: Serological and proteomic evaluation of antibody responses in the identification of tumor antigens in renal cell carcinoma.
Proteomics. 2003 Jan;3(1):45-55.
- Vaishnav AK, Orlinick JR, Chu JL, Krammer PH, Chao MV, Elkon KB.: The molecular basis for apoptotic defects in patients with CD95 (Fas/Apo-1) mutations.
Erratum in: J Clin Invest 1999 Apr;103(7):1099.
J Clin Invest. 1999 Feb;103(3):355-63.
- van Parijs L, Perez VL, Abbas AK: Mechanisms of peripheral T cell tolerance.
Novartis Found Symp 1998;215:5-14; discussion 14-20, 33-40
- van der Spek PJ, Eker A, Rademakers S, Visser C, Sugawara K, Masutani C, Hanaoka F, Bootsma D, Hoeijmakers JH.: XPC and human homologs of RAD23: intracellular localization and relationship to other nucleotide excision repair complexes.
Nucleic Acids Res. 1996 Jul 1;24(13):2551-9.
- von Muhlen CA, Tan EM.: Autoantibodies in the diagnosis of systemic rheumatic diseases.
Semin Arthritis Rheum. 1995 Apr;24(5):323-58.
- Vyse TJ, Todd JA: Genetic analysis of autoimmune disease.
Cell 1996 May 3;85(3):311-8
- Wallukat G, Nissen E, Morwinski R, Muller J.: Autoantibodies against the beta- and muscarinic receptors in cardiomyopathy.
Herz. 2000 May;25(3):261-6. Related Articles, Links
- Wallukat G, Blasig IE, Morwinski R, Herrmann HJ, Rohde E.: The sera of spontaneously hypertensive rats contain agonistic auto-antibodies against the beta 1-adrenoceptor.
J Hypertens. 1995 Sep;13(9):1031-6.

- Wallukat G, Wollenberger A, Morwinski R, Pitschner HF.: Anti-beta 1-adrenoceptor autoantibodies with chronotropic activity from the serum of patients with dilated cardiomyopathy: mapping of epitopes in the first and second extracellular loops.
Erratum in:
J Mol Cell Cardiol 1995 Nov;27(11):2529.
J Mol Cell Cardiol. 1995 Jan;27(1):397-406.
- Wang L, Darling J, Zhang JS, Liu W, Qian J, Bostwick D, Hartmann L, Jenkins R, Bardenhauer W, Schutte J, Opalka B, Smith DL.: Loss of expression of the DRR 1 gene at chromosomal segment 3p21.1 in renal cell carcinoma.
Genes Chromosomes Cancer. 2000 Jan;27(1):1-10.
- Warraich RS, Noutsias M, Kazak I, Seeberg B, Dunn MJ, Schultheiss HP, Yacoub MH, Kuhl U, Kasac I.: Immunoglobulin G3 cardiac myosin autoantibodies correlate with left ventricular dysfunction in patients with dilated cardiomyopathy: immunoglobulin G3 and clinical correlates.
Am Heart J. 2002 Jun;143(6):1076-84.
Erratum in:
Am Heart J. 2003 Feb;145(2):213.. Kasac Ilkay [corrected to Kazak Ilkay]
- Warraich RS, Pomerance A, Stanley A, Banner NR, Dunn MJ, Yacoub MH.: Cardiac myosin autoantibodies and acute rejection after heart transplantation in patients with dilated cardiomyopathy.
Transplantation. 2000 Apr 27;69(8):1609-17. Related Articles, Links
- Warraich RS, Dunn MJ, Yacoub MH.: Subclass specificity of autoantibodies against myosin in patients with idiopathic dilated cardiomyopathy: pro-inflammatory antibodies in DCM patients.
Biochem Biophys Res Commun. 1999 Jun 7;259(2):255-61.
- Weller MG: Classification of protein microarrays and related techniques.
Anal Bioanal Chem 2003 Jan;375(1):15-7
- Wen YD, Cress WD, Roy AL, Seto E.: Histone deacetylase 3 binds to and regulates the multifunctional transcription factor TFII-I.
J Biol Chem. 2003 Jan 17;278(3):1841-7. Epub 2002 Oct 18.
- Winter G, Griffiths AD, Hawkins RE, Hoogenboom HR: Making antibodies by phage display technology.
Annu Rev Immunol. 1994;12:433-55.
- Yang WM, Tsai SC, Wen YD, Fejer G, Seto E.: Functional domains of histone deacetylase-3.
J Biol Chem. 2002 Mar 15;277(11):9447-54. Epub 2002 Jan 04.
- Zhao L, Samuels T, Winckler S, Korgaonkar C, Tompkins V, Horne MC, Quelle DE.: Cyclin G1 has growth inhibitory activity linked to the ARF-Mdm2-p53 and pRb tumor suppressor pathways.
Mol Cancer Res. 2003 Jan;1(3):195-206.
- Zucman-Rossi J, Legoix P, Thomas G.: Identification of new members of the Gas2 and Ras families in the 22q12 chromosome region.
Genomics. 1996 Dec 15;38(3):247-54.