

(原著)

(2002年)

1. Schwarz-Lauer LL, Chazenbalk GD, MacLachlan SM, Ochi Y, Nagayama Y, Rapoport B. Evidence for a simplified view of autoantibody interactions with the TSH receptor. **Thyroid**. 12 (2): 115-120, 2002.

2. Nagayama Y, Kita-Furuyama M, Nakao K, Ando T, Mizuguchi H, Hayakawa T, Eguchi K, Niwa M. A novel murine model of Graves' hyperthyroidism with intramuscular injection of adenovirus expressing thyrotropin receptor. **J Immunol**. 168(6): 2789-2794, 2002.

3. Kakinuma A, Nagayama Y. Multiple messenger ribonucleic acid transcripts and revised gene organization of human TSH receptor. **Endocrine J**. 49(2): 175-180, 2002.

4. Kuroda H, Ohtsuru A, Futakuchi M, Kawashita Y, Nagayama Y, Fukuda E, Namba H, Shirai T, Kanematsu T, Yamashita S. Distinctive gene expression of receptor-type tyrosine kinase families during rat hepatocarcinogenesis. **Int J Mol Med**. 9 (5): 473-480, 2002.

5. Kawamata Y, Nagayama Y, Nakao K, Mizuguchi H, Hayakawa T, Ishii N. Receptor-independent augmentation of adenovirus-mediated gene transfer with chitosan in vitro. **Biomaterials**. 23 (23): 4573-4579, 2002.

6. Tamada Y, Nakao K, Nagayama Y, Ichikawa T, Kawamata Y, Hamasaki K, Nakata K, Eguchi K, Ishii N. p48 overexpression enhances interferon-mediated expression and activity of double-stranded RNA-dependent protein kinase (PKR) in human hepatoma cells. **J Hepatol**. 37 (4): 493-499, 2002.

7. Ando T, Latif R, Prisker A, Moran T, Nagayama Y, Davies TF. A monoclonal thyroid-stimulating antibody. **J Clin Invest.** 110 (11): 1667-1674, 2002.

8. Ito M, Nakashima M, Nakayama T, Ohtsuru A, Nagayama Y, Takamura N, Demedchik EP, Sekine I, Yamashita S. Expression of receptor-type tyrosine kinase, Axl, and its ligand, Gas6, in pediatric thyroid carcinomas around Chernobyl. **Thyroid.** 12 (11): 971-975, 2002.

(2003年)

1. Yanagi K, Nagayama Y, Nakao K, Saeki A, Matsumoto K, Ohata K, Ichikawa T, Ishikawa H, Hamasaki K, Ishii N, Eguchi K. Immuno-gene therapy with adenoviruses expressing fms-like tyrosine kinase 3 ligand and CD40 ligand for mouse hepatoma cells *in vivo*. **Int J Oncol**. 22(2): 345-351, 2003.
2. Kita-Furuyama M, Nagayama Y, Pichurin P, McLachlan SM, Rapoport B, Eguchi K. Dendritic cells infected with adenovirus expressing the thyrotropin receptor induce Graves' hyperthyroidism in BALB/c mice. **Clin Exp Immunol**. 131(2): 234-240, 2003.
3. Nagayama Y, McLachlan SM, Rapoport B, Niwa M. A major role for non-major histocompatibility complex genes but not for microorganisms in a novel murine model of Graves' hyperthyroidism. **Thyroid**. 13(3): 233-238, 2003.
4. Nagayama Y, Mizuguchi H, Hayakawa T, Niwa M, McLachlan SM, Rapoport B. Prevention of autoantibody-mediated Graves'-like hyperthyroidism in mice by IL-4, a Th2 cytokine. **J Immunol**. 170 (7): 3522-3527, 2003.
5. Kita A, Uotani S, Kuwahara H, Takahashi R, Oshima K, Yamasaki H, Mizuguchi H, Hayakawa T, Nagayama Y, Yamaguchi Y, Eguchi K. Vanadate enhances leptin-induced activation of JAK/STAT pathway in CHO cells. **Biochem Biophys Res Commun**. 302(4): 805-809, 2003.
6. Schwarz-Lauer L, Pichurin P, Chen C-R, Nagayama Y, Paras C, Morris JC, Rapoport B, McLachlan SM. The cysteine-rich amino-terminus of the thyrotropin receptor is the immunodominant linear antibody epitope in mice immunized using naked DNA or adenovirus vectors. **Endocrinology**. 144 (5): 1718-1725, 2003.

7. Guo J, Pichurin P, Nagayama Y, Rapoport B, McLachlan SM. Insight into antibody responses induced by plasmid or adenoviral vectors encoding thyroid peroxidase, a major thyroid autoantigen. **Clin Exp Immunol**. 132 (3): 408-415, 2003.
8. Chen C-R, Pichurin P, Nagayama Y, Latrofa F, Rapoport B, McLachlan SM. The thyrotropin receptor autoantigen in Graves' disease is the culprit as well as the victim. **J Clin Invest**. 111 (12): 1897-1904, 2003.
9. Nagayama Y, Nakao K, Mizuguchi H, Hayakawa T, Niwa M. Enhanced antitumor effect of combined replicative adenovirus and non-replicative adenovirus expressing interleukin-12 in an immunocompetent mouse model. **Gene Therapy**. 10 (16): 1400-1403, 2003.
10. Nagayama Y. Novel murine models of thyroid autoimmunity. **Current Opinion in Endocrinology & Diabetes**. 10: 364-370, 2003.
11. Abiru N, Sun F, Kawasak E, Yamasaki H, Oshima K, Nagayama Y, Mizuguchi H, Hayakawa T, Miao D, Liu E, Eisenbarth GS, Eguchi K. *In vivo* expression of B:923 peptide/I-A^{g7} complex may abrogate the inhibition of diabetes induced by RGD-fiber-mutant adenovirus in NOD mice. **Ann NY Acad Sci**. 1005: 218-221, 2003.
12. Pichurin P, Aliesky H, Chen C-R, Nagayama Y, Rapoport B, McLachlan SM. Thyrotropin receptor-specific memory T cell responses require normal B cells in a murine model of Graves' disease. **Clin Exp Immunol**. 134 (3): 396-402, 2003.
13. Saeki A, Nakao K, Nagayama Y, Yanagi K, Matsumoto K, Hayashi T, Ishikawa H, Hamasaki K, Ishii N, Eguchi K. Diverse efficacy of vaccination therapy using the α -

fetoprotein gene against hepatocellular carcinoma. **Int J Oncol.** 13 (1): 111-116, 2003.

14. Tanaka K, Towata S, Nakao K, Mizuguchi H, Hayakawa T, Niwa M, Ishii N, Nagayama Y. Thyroid cancer immunotherapy with retroviral and adenoviral vectors expressing granulocyte-macrophage colony stimulating factor and interleukin-12 in a rat model. **Clin Endocrinol.** 59 (6): 734-742, 2003.

(2004年)

1. Chen C-R, Pichurin P, Chazenbalk GD, Aliesky H, Nagayama Y, McLachlan SM, Rapoport B. Low dose immunization with adenovirus expressing the TSH receptor A-subunit deviates the antibody response towards that of autoantibodies in human Graves' disease. **Endocrinology**. 145 (1): 228-233, 2004.
2. Pichurin PN, Chen CR, Nagayama Y, Pichurina O, Rapoport B, McLachlan SM. Evidence that factors other than particular thyrotropin receptor T cell epitopes contribute to the development of hyperthyroidism in murine Graves' disease. **Clin Exp Immunol**. 135 (3): 391-397, 2004.
3. Sundaresan G, Paulmurugan R, Berger F, Stiles B, Nagayama Y, Wu H, Gambhir SS. MicroPET imaging of Cre-loxP mediated conditional activation of a PET reporter gene. **Gene Ther**. 11 (7): 609-618, 2004.
4. Nagayama Y, Niwa M, McLachlan SM, Rapoport B. *Schistosoma mansoni* and α -galactosylceramide: prophylactic effect of Th2 immune deviation in a mouse model of Graves' hyperthyroidism. **J Immunol**. 173 (3): 2167-2173, 2004.
5. Chen RC-R, Aliesky H, Pichurin PN, Nagayama Y, McLachlan SM, Rapoport B. Susceptibility rather than resistance to hyperthyroidism is dominant in a thyrotropin receptor adenovirus-induced animal model of Graves' disease as revealed by BALB/c-C57BL/6 hybrid mice. **Endocrinology**. 145 (11): 4927-4933, 2004.

6. Nagayama Y, McLachlan SM, Rapoport B, Oishi K. Graves' hyperthyroidism and the hygiene hypothesis in a mouse model. **Endocrinology**. 145 (11): 5075-5079, 2004.

7. Nagayama Y, Saitoh O, McLachlan SM, Rapoport B, Kano H, Kumazawa Y. TSH receptor-adenovirus-induced Graves' disease is attenuated in both interferon- γ and interleukin-4 knockout mice; implications for the Th1/Th2 paradigm. **Clin Exp Immunol**. 138 (3): 417-422, 2004.

(2005年)

1. Hayashi T, Nakao K, Nagayama Y, Saitoh O, Ichikawa T, Ishikawa H, Hamasaki K, Eguchi K, Ishii N. Vaccination with dendritic cells pulsed with apoptotic cells elicits effective antitumor immunity in murine hepatoma models. **Int J Oncol**. 26 (5): 1313-1319, 2005.
2. Nagayama Y. Animal model of Graves' disease. **Acta Med Nagasaki**. 50 (6): 49-53, 2005.
3. Saitoh O, Mizutori Y, Takamura N, Kita A, Kuwahara H, Yamasaki H, Nagayama Y. Adenovirus-mediated gene delivery of interleukin-10, but not transforming growth factor b, ameliorates Graves' hyperthyroidism in BALB/c mice. **Clin Exp Immunol**. 141 (3): 405-411, 2005.
4. Nagayama Y. Animal models of Graves' hyperthyroidism. **Endocr J**. 52 (4): 385-394, 2005.
5. McLachlan SM, Nagayama Y, Rapoport B. Insight into Graves' hyperthyroidism from animal models. **Endocr Rev**. 26(6): 800-832, 2005.

(2006年)

1. Mizutori Y, Saitoh O, Eguchi K, Nagayama Y. Adenovirus coding the thyrotropin receptor A subunit improves the efficacy of dendritic cell-based mouse model of Graves' hyperthyroidism. **J Autoimmunity**. 26 (1): 32-36, 2006.

2. Saitoh O, Nagayama Y. Regulation of Graves' hyperthyroidism with naturally occurring CD4⁺CD25⁺ regulatory T cells in a mouse model. **Endocrinology**. 147(5):2417-2422, 2006.

3. Motoyoshi Y, Kaminoda K, Saitoh O, Hamasaki K, Nakao K, Ishii N, Nagayama Y, Eguchi K. Different mechanisms for anti-tumor effects of low- and high-dose cyclophosphamide. Submitted to **Int J Oncol**.

(2007年)

1. Nagayama Y, Hase W, Motoyoshi Y, Saitoh O, Sogawa R, Nakao K. Distinct responses of two hepatocellular carcinoma cell lines of a similar origin to immunotherapies targeting regulatory or effector T cells. **Oncol Rep.** 17 (5): 1269-1273, 2007.

2. Moriuchi A, Yamasaki H, Shimamura M, Kita A, Kuwahara H, Fujishima K, Satoh T, Fukushima K, Fukushima T, Hayakawa T, Mizuguchi H, Nagayama Y, Abiru N, Kawasaki E, Eguchi K. Induction of human adiponectin gene transcription by telmisartan, angiotensin receptor blocker, independently on PPAR-g activation. **Biochem Biophys Res Com.** 356 (4):1024-30, 2007.

3. Mizutori Y, Saitoh O, Eguchi K, Nagayama Y. Lack of effect of methimazole on dendritic cell (DC) function and DC-induced Graves' hyperthyroidism in mice. **Autoimmunity.** 40 (5): 397-402, 2007.

4. Nagayama Y, Horie I, Saitoh O, Nakahara M, Abiru N. CD4⁺CD25⁺ naturally occurring regulatory T cells and not lymphopenic proliferation play a role in the pathogenesis of experimental autoimmune thyroiditis in NOD-H2^{h4} mice. **J Autoimmun.** 29(2-3): 195-202 2007.

5. Nagayama Y. Animal models of Graves' hyperthyroidism. **Thyroid**. 17 (10): 981-988, 2007.
6. Saitoh O, Abiru N, Nakahara M, Nagayama Y. CD8⁺CD122⁺ T cells, a newly identified regulatory T cells, negatively regulate Graves' disease in a murine model. **Endocrinology**. 148 (12): 6040-6046, 2007.
7. McLachlan SM, Nagayama Y, Pichurin PN, Mizutori Y, Chen C-R, Misharin A, Aliesky HA, Rapoport B. The link between Graves' disease and Hashimoto's thyroiditis: a role for regulatory T cells. **Endocrinology**. 148 (12): 5724-5733, 2007.
8. Nishihara E, Nagayama Y, Amino N, Hishinuma A, Yoshida H, Kubota S, Fukata S, Kuma K, Miyauchi A. Novel thyrotropin receptor germline mutation (Asp617Tyr) causing hereditary hyperthyroidism with adult onset in a Japanese family. **Endocrine J**. 54 (6): 927-934, 2007.
9. Sedliarou I, Matsuse M, Saenko V, Rogounovitch T, Nakazawa Y, [Mitsutake N, Namba H, Nagayama Y, Yamashita S.](#) Overexpression of wild-type THRbeta1 suppresses the growth and invasiveness of human papillary thyroid cancer cells. **Anticancer Res**. 27(6B):3999-4009, 2007.

(2008年)

1. Fukushima K, Kobayashi M, Nagayama Y, Satoh T, Nakahara M, Kawasaki E, Yamasaki H, Ueha S, Matsushima K, Liu E, Eisenbarth GS, Eguchi K, Abiru N. Combined activation of innate and adaptive immunity with polyinosinic-polycytidylic acid and insulin B:9-23 self-peptide in the genetically susceptible NOD mouse: differential effects on insulinitis and diabetes progression. **Biochem Biophys Res Commun.** 367 (4): 719-724, 2008.
2. Nagayama Y, Kaminoda K, Mizutori Y, Saitoh O, Abiru N. Exacerbation of autoimmune thyroiditis by a single dose of whole body irradiation in NOD-H2^{h4} mice. **Int J Radiat Biol.** 84 (9): 761-769, 2008.
3. Mizutori Y, Nagayama Y, Flower D, Misharin A, Aliesky HA, Rapoport B, McLachlan SM. Role of the human A-subunit in transgenic mice that develop thyroid lymphocytic infiltration after immunization and regulatory T cell depletion. **Clin Exp Immunol.** 154 (3): 305-315, 2008.
4. Nagayama Y. Mouse models of Graves' disease. **The Proceeding for 13th International Congress of Endocrinology.** 115-118, 2008.

(2009年)

1. Nakahara M, Nagayama Y, Sogawa R, Saitoh O, Tone S, Abiru N. Expression of immuno-regulatory molecules on the thyrocytes protects NOD-H2^{h4} mice from developing autoimmune thyroiditis. **Endocrinology**. 150 (3): 1545-1551, 2009.
2. Misharin A, Aliesky H, Nagayama Y, Rapoport B, McLachlan SM. Studies in mice deficient for the Autoimmune Regulator (Aire) and transgenic for the thyrotropin receptor reveal a role for Aire in tolerance for thyroid autoantigens. **Endocrinology**. 150 (6): 2948-2956, 2009.
3. Misharin AV, Nagayama Y, Holly A. Aliesky AH, Mizutori Y, Rapoport B, McLachlan SM. Attenuation of induced hyperthyroidism in mice by pre-treatment with thyrotropin receptor protein: diversion of thyroid stimulating antibody to non-functional antibody induction. **Endocrinology**. 150 (8): 3944-3952, 2009.
4. Saitoh O, Mitsutake N, Nakayama T, Nagayama Y. Fibroblast-mediated *in vivo* and *in vitro* growth promotion of thyroid carcinoma FTRL-Tc, not normal thyroid FRTL5, cells. **Thyroid**. 19(7):735-742, 2009.

5. Horie I, Abiru N, Nagayama Y, Saitoh O, Ichikawa T, Iwakura Y, Eguchi K. T helper type 17 immune response plays an indispensable role for development of experimental autoimmune thyroiditis in NOD-H2^{h4} mice. **Endocrinology**. 150 (11): 5135-5142, 2009.

6. Nagayama Y, Ichikawa T, Saitoh O, Abiru N. Induction of late-onset, spontaneous autoimmune thyroiditis by a single low-dose irradiation in non-obese diabetic-H2^{h4} mice. **J Radiat Res**. 50 (6): 573-577, 2009.