

7. Department of Pathology

- 1) Nakamura T, Sato Y, Watanabe D, Ito H, Shimonohara N, Tsuji T, Nakajima N, Suzuki Y, Matsuo K, Nakagawa H, Sata T, Katano H. Nuclear localization of Merkel cell polyomavirus large T antigen in Merkel cell carcinoma. *Virology*. 2010. 398:273-9.
- 2) Ohno H, Ogata Y, Suguro H, Yokota S, Watanabe A, Kamei K, Yamagoe S, Ishida-Okawara A, Kaneko Y, Horino A, Yamane K, Tsuji T, Nagata N, Hasegawa H, Arakawa Y, Sata T, Miyazaki Y. An outbreak of histoplasmosis among healthy young Japanese women after traveling to Southeast Asia. *Intern Med*. 2010. 49:491-5.
- 3) Kanno T, Sato Y, Nakamura T, Sakamoto K, Sata T, Katano H. Genotypic and clinicopathological characterization of Kaposi's sarcoma-associated herpesvirus infection in Japan. *J Med Virol*. 2010. 82(3):400-6.
- 4) Aina A, Ichinohe T, Tamura SI, Kurata T, Sata T, Tashiro M, Hasegawa H. Zymosan enhances the mucosal adjuvant activity of poly(I:C) in a nasal influenza vaccine. *J Med Virol*. 2010. 82(3):476-84.
- 5) Hatano B, Kojima A, Sata T, Katano H. Virus detection using viro-ademebeads, a rapid capture system for viruses, and plaque assay in intentionally virus-contaminated beverages. *Jpn J Infect Dis*. 2010. 63(1):52-4.
- 6) Hatano B, Maki T, Obara T, Fukumoto H, Hagsawa K, Matsushita Y, Okutani A, Bazartseren B, Inoue S, Sata T, Katano H. LAMP Using a Disposable Pocket Warmer for Anthrax Detection, a Highly Mobile and Reliable Method for Anti-Bioterrorism. *Jpn J Infect Dis*. 2010. 63(1):36-40.
- 7) Nakajima N, Hata S, Sato Y, Tobiume M, Katano H, Kaneko K, Nagata N, Kataoka M, Aina A, Hasegawa H, Tashiro M, Kuroda M, Odai T, Urasawa N, Ogino T, Hanaoka H, Watanabe M, Sata T. The First Autopsy Case of Pandemic Influenza (A/H1N1pdm) Virus Infection in Japan: Detection of a High Copy Number of the Virus in Type II Alveolar Epithelial Cells by Pathological and Virological Examination. *Jpn J Infect Dis*. 2010. 63(1):67-71.
- 8) Takiyama A, Wang L, Tanino M, Kimura T, Kawagishi N, Kunieda Y, Katano H, Nakajima N, Hasegawa H, Takagi T, Nishihara H, Sata T, Tanaka S. Sudden Death of a Patient with Pandemic Influenza (A/H1N1pdm) Virus Infection by Acute Respiratory Distress Syndrome. *Jpn J Infect Dis*. 2010. 63(1):72-4.
- 9) Sato Y, Shimonohara N, Hanaki KI, Goto M, Yamakawa Y, Horiuchi M, Takahashi H, Sata T, Nakajima N. ImmunoAT method: An initial assessment for the detection of abnormal isoforms of prion protein in formalin-fixed and paraffin-embedded tissues. *J Virol Methods*. 2010. 165(2):261-7. Epub 2010 Feb 10.
- 10) Kimura T, Ishikawa K, Sakasegawa Y, Teruya K, Sata T, Schätzl H, Doh-Ura K. GABAA receptor subunit beta1 is involved in the formation of protease-resistant prion protein in prion-infected neuroblastoma cells. *FEBS Lett*. 2010. 584:1193-8. Epub 2010 Feb 14.
- 11) Sakamoto K, Asanuma H, Nakamura T, Kanno T, Sata T, Katano H. Immune response to intranasal and intraperitoneal immunization with Kaposi's sarcoma-associated herpesvirus in mice. *Vaccine*. 2010. 28:3325-32.
- 12) Ikebe T, Ato M, Matsumura T, Hasegawa H, Sata T, Kobayashi K, Watanabe H. Highly frequent mutations in negative regulators of multiple virulence genes in group A streptococcal toxic shock syndrome isolates. *PLoS Pathog*. 2010. 6:e1000832.
- 13) Tatemichi Y, Oikawa H, Maesawa C, Ambo J, Sato M, Koike H, Sata T, Fujioka T, Masuda T. Detection of human papillomavirus in a urothelial carcinoma mimicking urethral caruncle. *Int J Urol*. 2010. 17:189-91.
- 14) Serizawa M, Sekizuka T, Okutani A, Banno S, Sata T, Inoue S, Kuroda M. Genomewide screening for novel genetic variations associated with ciprofloxacin resistance in *Bacillus anthracis*. *Antimicrob Agents Chemother*. 2010. 54:2787-92.
- 15) Takahashi H, Akazawa D, Kato T, Date T, Shirakura M, Nakamura N, Mochizuki H, Tanaka-Kaneko K, Sata T, Tanaka Y, Mizokami M, Suzuki T, Wakita T. Biological properties of purified recombinant HCV particles with an epitope-tagged envelope. *Biochem Biophys Res Commun*. 2010. 395:565-71.
- 16) Kuroda M, Katano H, Nakajima N, Tobiume M, Aina A, Sekizuka T, Hasegawa H, Tashiro M, Sasaki Y, Arakawa Y, Hata S, Watanabe M, Sata T. Characterization of quasispecies of pandemic 2009 influenza A virus (A/H1N1/2009) by de novo sequencing using a next-generation DNA sequencer. *PLoS One*. 2010.

- 5(4):e10256.
- 17) Iwamaru Y, Imamura M, Matsuura Y, Masujin K, Shimizu Y, Shu Y, Kurachi M, Kasai K, Murayama Y, Fukuda S, Onoe S, Hagiwara K, Yamakawa Y, Sata T, Mohri S, Okada H, Yokoyama T. Accumulation of L-type bovine prions in peripheral nerve tissues. *Emerg Infect Dis.* 2010. 16:1151-4.
 - 18) Ueno T, Tanaka K, Kaneko K, Taga Y, Sata T, Irie S, Hattori S, Ogawa-Goto K. Enhancement of procollagen biosynthesis by p180 through augmented ribosome association on the endoplasmic reticulum in response to stimulated secretion. *J Biol Chem.* 2010. 285:29941-50.
 - 19) Ohtaki N, Takahashi H, Kaneko K, Gomi Y, Ishikawa T, Higashi Y, Kurata T, Sata T, Kojima A. Immunogenicity and efficacy of two types of West Nile virus-like particles different in size and maturation as a second-generation vaccine candidate. *Vaccine.* 2010. 28:6588-96.
 - 20) Satoh K, Tobiume M, Matsui Y, Mutsukura K, Nishida N, Shiga Y, Eguchi K, Shirabe S, Sata T. Establishment of a standard 14-3-3 protein assay of cerebrospinal fluid as a diagnostic tool for Creutzfeldt-Jakob disease. *Lab Invest.* 2010. 90:1637-44.
 - 21) Ichinohe T, Aina A, Ami Y, Nagata N, Iwata N, Kawaguchi A, Suzuki Y, Odagiri T, Tashiro M, Takahashi H, Strayer DR, Carter WA, Chiba J, Tamura S, Sata T, Kurata T, Hasegawa H. Intranasal administration of adjuvant-combined vaccine protects monkeys from challenge with the highly pathogenic influenza A H5N1 virus. *J Med Virol.* 2010. 82:1754-61.
 - 22) Yamada S, Kosugi I, Katano H, Fukui Y, Kawasaki H, Arai Y, Kurane I, Inoue N. In vivo imaging assay for the convenient evaluation of antiviral compounds against cytomegalovirus in mice. *Antiviral Res.* 2010. 88:45-52.
 - 23) Ueno T, Kaneko K, Katano H, Sato Y, Mazitschek R, Tanaka K, Hattori S, Irie S, Sata T, Ogawa-Goto K. Expansion of the trans-Golgi network following activated collagen secretion is supported by a coiled-coil microtubule-bundling protein, p180, on the ER. *Exp Cell Res.* 2010. 316:329-40.
 - 24) Shintaku M, Kaneda D, Tada K, Katano H, Sata T. Human herpes virus 6 encephalomyelitis after bone marrow transplantation: Report of an autopsy case. *Neuropathology.* 2010. 30:50-5.
 - 25) Utachee P, Nakamura S, Isarangkura-na-ayuthaya P, Tokunaga K, Sawanpanyalert P, Ikuta K, Auwanit W, Kameoka M. Two N-linked glycosylation sites in V2 and C2 regions of human immunodeficiency virus type 1 CRF01_AE envelope glycoprotein gp120 regulate viral neutralization susceptibility to the human monoclonal antibody specific for CD4 binding domain. *J Virol.* 2010. 84:4311-20.
 - 26) Mitsuishi T, Iwabu Y, Tokunaga K, Sata T, Kaneko T, Ohara K, Ohsawa I, Oda F, Yamada Y, Kawana S, Ozaki K, Nakatake M, Yamada O. Combined analysis of cell growth and apoptosis-regulating proteins in HPVs associated anogenital tumors. *BMC Cancer.* 2010. 10:118.
 - 27) Iwabu Y, Fujita H, Tanaka Y, Sata T, Tokunaga K. Direct internalization of cell-surface BST-2/tetherin by the HIV-1 accessory protein Vpu. *Commun Integr Biol.* 2010. 3(4):366-9.
 - 28) Kameoka M, Isarangkura-na-Ayuthaya P, Kameoka Y, Sapsutthipas S, Soonthornsata B, Nakamura S, Tokunaga K, Sawanpanyalert P, Ikuta K, Auwanit W. The role of lysine residue at amino acid position 165 of human immunodeficiency virus type 1 CRF01_AE Gag in reducing viral drug susceptibility to protease inhibitors. *Virology.* 2010. 405(1):129-38.
 - 29) Iwabu Y, Kinomoto M, Tatsumi M, Fujita H, Shimura M, Tanaka Y, Ishizaka Y, Nolan D, Mallal S, Sata T, Tokunaga K. Differential anti-APOBEC3G activity of HIV-1 Vif proteins derived from different subtypes. *J Biol Chem.* 2010. 285(46):35350-8.
 - 30) Ward SC, Thung SN, Lim KH, Tran TT, Hong KB, Hoang PL, Jang JJ, Park YN, Abe K. Hepatic progenitor cells in liver cancers from Asian children. *Liver Int.* 2010. 30:102-11.
 - 31) Htun MM, Kyi KP, Oo KM, Khin M, Tun WM, Oo SS, Lwin KO, Abe K. Presence of hepatitis C virus RNA by nested polymerase chain reaction in plasma-derived hepatitis B vaccine non-responders. *Myanmar Health Sciences Research Journal.* 2010. 22:101-4.
 - 32) Abe K. Chapter 76: Hepatitis B virus. In: Don Liu eds. *Molecular detection of human viral pathogens.* Florida, USA, Taylor & Francis CRC Press, pp 847-59, 2010.
 - 33) Nagata N, Iwata-Yoshikawa N, Taguchi F. Studies of severe acute respiratory syndrome coronavirus pathology in human cases and animal models. *Vet Pathol.* 2010. 47:881-92.

- 34) Matsuyama S, Nagata N, Shirato K, Kawase M, Takeda M, Taguchi F. Efficient activation of the severe acute respiratory syndrome coronavirus spike protein by the transmembrane protease TMPRSS2. *J Virol.* 2010. 84:12658-64.
- 35) Watanabe S, Masangkay JS, Nagata N, Morikawa S, Mizutani T, Fukushi S, Alviola P, Omatsu T, Ueda N, Iha K, Taniguchi S, Fujii H, Tsuda S, Endoh M, Kato K, Tohya Y, Kyuwa S, Yoshikawa Y, Akashi H. Bat coronaviruses and experimental infection of bats, the Philippines. *Emerg Infect Dis.* 2010. 16:1217-23.
- 36) Iwaki M, Komiya T, Yamamoto A, Ishiwa A, Nagata N, Arakawa Y, Takahashi M. Genome organization and pathogenicity of *Corynebacterium diphtheriae* C7(-) and PW8 strains. *Infect Immun.* 2010. 78:3791-800.
- 37) Hayasaka D, Nagata N, Hasegawa H, Sata T, Takashima I, Koike S. Early mortality following intracerebral infection with the Oshima strain of tick-borne encephalitis virus in a mouse model. *J Vet Med Sci.* 2010. 72:391-396.
- 38) Haga S, Nagata N, Okamura T, Yamamoto N, Sata T, Yamamoto N, Sasazuki T, Ishizaka Y. TACE antagonists blocking ACE2 shedding caused by the spike protein of SARS-CoV are candidate antiviral compounds. *Antiviral Res.* 2010. 85:551-5.
- 39) Yoshikawa T, Hill TE, Yoshikawa N, Popov VL, Galindo CL, Garner HR, Peters CJ, Tseng CT. Dynamic innate immune responses of human bronchial epithelial cells to severe acute respiratory syndrome-associated coronavirus infection. *PLoS One.* 2010. 5(1):e8729.
- 40) Morrill JC, Ikegami T, Yoshikawa-Iwata N, Lokugamage N, Won S, Terasaki K, Zamoto-Niikura A, Peters CJ, Makino S. Rapid accumulation of virulent rift valley Fever virus in mice from an attenuated virus carrying a single nucleotide substitution in the m RNA. *PLoS One.* 2010. 5(4):e9986
- 41) Orba Y, Suzuki T, Makino Y, Kubota K, Tanaka S, Kimura T, Sawa H. Large T antigen promotes JC virus replication in G2-arrested cells by inducing ATM- and ATR-mediated G2 checkpoint signaling. *J Biol Chem.* 2010. 285(2):1544-54.
- 42) Suzuki T, Orba Y, Okada Y, Sunden Y, Kimura T, Tanaka S, Nagashima K, Hall WW, Sawa H. The human polyoma JC virus agnoprotein acts as a viroporin. *PLoS Pathog.* 2010. 6(3):e1000801.
- 43) Ohtake N, Niikura K, Suzuki T, Nagakawa K, Mikuni S, Matsuo Y, Kinjo M, Sawa H, Ijiro K. Low pH-Triggered Model Drug Molecule Release from Virus-Like Particles. *Chembiochem.* 2010. 11(7):959-62.
- 44) Suzuki T, Yamanouchi S, Sunden Y, Orba Y, Kimura T, Sawa H. Natalizumab has no direct biological effect on JC virus infectivity in permissive human neural cell lines. *J Med Virol.* 2010. 82(7):1229-35.
- 45) Hasebe R, Suzuki T, Makino Y, Igarashi M, Yamanouchi S, Maeda A, Horiuchi M, Sawa H, Kimura T. Transcellular transport of West Nile virus-like particles across human endothelial cells depends on residues 156 and 159 of envelope protein. *BMC Microbiol.* 2010. 10:165.
- 46) Kawaguchi A, Suzuki T, Kimura T, Sakai N, Ayabe T, Sawa H, Hasegawa H. Functional analysis of an alpha-helical antimicrobial peptide derived from a novel mouse defensin-like gene. *Biochem Biophys Res Commun.* 2010. 398(4):778-84.
- 47) Ishii Y, Tanaka K, Kondo K, Takeuchi T, Mori S, Kanda T. Inhibition of nucleareentry of HPV16 pseudovirus-packaged DNA by an anti-HPV16 L2 neutralizing antibody. *Virology.* 2010. 406(2):181-8.
- 48) Hajj E H, El-Sabban M, Hasegawa H, Zaatari G, Ablain J, Saab TS, Janin A, Mahfouz R, Nasr R, Kfoury Y, Nicot C, Hermine O, Hall WW, de The H, Bazarbachi A. Therapy-induced selective loss of leukemia-initiating cell activity in murine ATL. *J Exp Med.* 2010 Dec 20;207(13):2785-92.
- 49) Isawa H, Kuwata R, Hoshino K, Tsuda Y, Sakai K, Watanabe S, Nishimura M, Satho T, Kataoka M, Nagata N, Hasegawa H, Bando H, Yano K, Sasaki T, Kobayashi M, Mizutani T, Sawabe K. Identification and molecular characterization of a new nonsegmented double-stranded RNA virus isolated from *Culex* mosquitoes in Japan. *Virus Res* 2010 Sep 25. [Epub ahead of print]
- 50) Watters KM, Dean J, Hasegawa H, Sawa H, Hall W, Sheehy N. Cytokine and growth factor expression by HTLV-1 Lck-tax transgenic cells in SCID mice. *AIDS Res Human Retrovir* 2010 May;26(5):593-603
- 51) Tamura S, Hasegawa H, Kurata T. Estimation of the effective doses of nasal-inactivated influenza vaccine in humans from mouse-model experiments. *Jpn J Infect Dis* 2010 Jan;63(1):8-15