

2. Department of Virology II

- 1) Yoshida T, Kasuo S, Azegami Y, Uchiyama Y, Satsumabayashi K, Shiraishi T, Katayama K, Wakita T, Takeda N, Oka T. Characterization of sapoviruses detected in gastroenteritis outbreaks and identification of asymptomatic adults with high viral load. *J Clin Virol.* 45(1):67-71. 2009.
- 2) Ootsuka Y, Yamashita Y, Ichikawa T, Kondo R, Oseto M, Katayama K, Takeda N, Oka T. Molecular characterization of sapoviruses detected in sporadic gastroenteritis cases in 2007 in Ehime Prefecture, Japan. *Jpn J Infect Dis.* 62(3):246-8. 2009.
- 3) Iwakiri A, Ganmyo H, Yamamoto S, Otao K, Mikasa M, Kizoe S, Katayama K, Wakita T, Takeda N, Oka T. Quantitative analysis of fecal sapovirus shedding: identification of nucleotide substitutions in the capsid protein during prolonged excretion. *Arch Virol.* 154(4):689-93. 2009.
- 4) Harada S, Okada M, Yahiro S, Nishimura K, Matsuo S, Miyasaka J, Nakashima R, Shimada Y, Ueno T, Ikezawa S, Shinozaki K, Katayama K, Wakita T, Takeda N, Oka T. Surveillance of pathogens in outpatients with gastroenteritis and characterization of sapovirus strains between 2002 and 2007 in Kumamoto Prefecture, Japan. *J Med Virol.* 81(6):1117-27. 2009.
- 5) Eiji Haramoto, Hiroyuki Katayama, Etsuko Utagawa, Shinichiro Ohgaki. Recovery of human norovirus from water by virus concentration methods. *J Virol Methods,* 2009;160;206-209.
- 6) Oka T, Miyashita K, Katayama K, Wakita T, Takeda N. Distinct genotype and antigenicity among genogroup II sapoviruses. *Microbiol Immunol.* 53(7):417-20, 2009.
- 7) Kitajima M, Oka T, Tohya Y, Katayama H, Takeda N, Katayama K. Development of a broadly reactive nested reverse transcription-PCR assay to detect murine noroviruses, and investigation of the prevalence of murine noroviruses in laboratory mice in Japan. *Microbiol Immunol.* 53(9):531-4. 2009
- 8) Oka T, Yokoyama M, Katayama K, Tsunemitsu H, Yamamoto M, Miyashita K, Ogawa S, Motomura K, Mori H, Nakamura H, Wakita T, Takeda N, Sato H. Structural and biological constraints on diversity of regions immediately upstream of cleavage sites in calicivirus precursor proteins. *Virology.* 394(1):119-29. 2009.
- 9) Someya Y, Takeda N: Insights into the Enzyme-Substrate Interaction in the Norovirus 3C-like Protease. *J Biochem* 146: 509-521, 2009.
- 10) Murakami K, Suzuki S, Aoki N, Okajima T, Nadano D, Uchida K, Yamashita K, Oka T, Katayama K, Takeda N, Matsuda T. Binding of Norovirus virus-like particles (VLPs) to human intestinal Caco-2 cells and the suppressive effect of pasteurized bovine colostrum on this VLP binding. *Bioscience, Biotechnology, and Biochemistry.* 74(3): 541-547. 2010.
- 11) Zhang Y, Wang H, Zhu S, Li Y, Song L, Liu Y, Liu G, Nishimura Y, Chen L, Yan D, Wang D, An H, Shimizu H, Xu A Xu W. Characterization of a rare natural intertypic type 2/type 3

- penta-recombinant vaccine-derived poliovirus isolated from a child with acute flaccid paralysis. *J Gen Virol* 91: 421-429, 2010.
- 12) Thorley B, Kelly H, Nishimura Y, Yoon YK, Brussen KA, Roberts J Shimizu H. Oral poliovirus vaccine type 3 from a patient with transverse myelitis is neurovirulent in a transgenic mouse model. *J Clin Virol* 44: 268-271, 2009.
 - 13) Nishimura Y, Shimojima M, Tano Y, Miyamura T, Wakita T Shimizu H. Human P-selectin glycoprotein ligand-1 is a functional receptor for enterovirus 71. *Nat Med* 15: 794-797, 2009.
 - 14) Mizuta K, Aoki Y, Suto A, Ootani K, Katsushima N, Itagaki T, Ohmi A, Okamoto M, Nishimura H, Matsuzaki Y, Hongo S, Sugawara K, Shimizu H Ahiko T. Cross-antigenicity among EV71 strains from different genogroups isolated in Yamagata, Japan, between 1990 and 2007. *Vaccine* 27: 3153-3158, 2009.
 - 15) Goto K, Sanefuji M, Kusuhara K, Nishimura Y, Shimizu H, Kira R, Torisu H Hara T. Rhombencephalitis and coxsackievirus A16. *Emerg Infect Dis* 15: 1689-1691, 2009.
 - 16) Arita M, Wakita T Shimizu H. Cellular kinase inhibitors that suppress enterovirus replication have a conserved target in viral protein 3A similar to that of enviroxime. *J Gen Virol* 90: 1869-1879, 2009.
 - 17) Arita M, Ling H, Yan D, Nishimura Y, Yoshida H, Wakita T Shimizu H. Development of a reverse transcription- loop-mediated isothermal amplification (RT-LAMP) system for a highly sensitive detection of enterovirus in the stool samples of acute flaccid paralysis cases. *BMC Infect Dis* 9: 208, 2009.
 - 18) Saeed M, Suzuki R, Kondo M, Aizaki H, Kato T, Mizuochi T, Wakita T, Watanabe H, Suzuki T: Evaluation of Hepatitis C Virus Core Antigen Assays in Detecting Recombinant Viral Antigens of Various Genotypes. *J Clin Microb* 47: 4141-4143, 2009.
 - 19) Hara H, Aizaki H, Matsuda M, Shinkai-Ouchi F, Inoue Y, Murakami K, Shoji I, Kawakami H, Matsuura Y, Lai MMC, Miyamura T, Wakita T, Suzuki T: Involvement of creatine kinase B in hepatitis C virus genome replication through interaction with the viral NS4A protein. *J Virol* 83: 5137-47, 2009.
 - 20) Shimoji T, Murakami K, Sugiyama Y, Matsuda M, Inubushi S, Nasu J, Shirakura M, Suzuki T, Wakita T, Kishino T, Hotta H, Miyamura T, Shoji I: Identification of annexin A1 as a novel substrate for E6AP-mediated ubiquitylation. *J Cellular Biochemistry*, 106: 1123-1135, 2009.
 - 21) Hmwe S, Aizaki H, Date T, Murakami K, Ishii K, Miyamura T, Koike K, Wakita T and Suzuki T: Identification of hepatitis C virus genotype 2a replicon variants with reduced susceptibility to ribavirin. *Antiviral Res* 85: 520-524, 2010.
 - 22) Kiyohara T, Totsuka A, Ishii K, Ito T, and Wakita T: Characterization of anti-idiotypic antibodies mimicking the antibody-binding site and the receptor-binding site on hepatitis A virus. *Arch Virol* 154:1263-1269, 2009.
 - 23) Kiyohara T, Ouchi Y, Sato T, Yoneyama T, Ishii K, Ito T, and Wakita T: Evaluation of an in-house anti-hepatitis A virus (HAV)-specific immunoglobulin M capture enzyme-linked immunosorbent assay kit and its practical use for analysis of an HAV outbreak. *J Med Virol* 81:1513-6, 2009.
 - 24) Masaki T, Suzuki R, Saeed M, Mori K, Matsuda M, Aizaki H, Ishii K, Maki N, Miyamura T, Matsuura M, Wakita T, and Suzuki T: Production of infectious hepatitis C virus by using RNA polymerase I-mediated transcription. *J Virol* 84: 5824-5835, 2009.
 - 25) Zhang YY, Zhang BH. Ishii K and Liang TJ. A novel

- function of CD81 in controlling hepatitis C virus replication. *J Virol*, 84: 3396-3407, 2009.
- 26) Ishii K, Hasegawa H, Nagata N, Ami Y, Fukushi S, Taguchi F, and Tsunetsugu-Yokota Y: Vaccine-induced neutralizing antibody against SARS-CoV Spike is highly effective for the protection of mice in the murine SARS model. *Microbiol Immunol* 53: 75-82, 2009.
- 27) Suzuki R, Moriishi K, Fukuda K, Shirakura M, Ishii K, Shoji I, Miyamura T, Matsuura M, Suzuki T: Proteasomal turnover of hepatitis C virus core protein is regulated by two distinct mechanisms: ubiquitin-dependent and ubiquitin independent but PA28g-dependent. *J Virol* 83: 2389-2392, 2009.
- 28) Yamashita T, Mori Y, Miyazaki N, Cheng RH, Yoshimura M, Unno H, Shima R, Moriishi K, Tsukihara T, Li TC, Takeda N, Miyamura T, Matsuura Y: Biological and immunological characteristics of hepatitis E virus-like particles based on the crystal structure. *Proc Natl Acad Sci U S A*. 106: 12986-91, 2009.
- 29) Sugitani M, Tamura A, Shimizu YK, Sheikh A, Kinukawa N, Shimizu K, Moriyama M, Komiyama K, Li TC, Takeda N, Arakawa Y, Suzuki K, Ishaque SM, Roy PK, Raihan A, Hasan M: Detection of hepatitis E virus RNA and genotype in Bangladesh. *J Gastroenterol Hepatol* 24: 599-604, 2009.
- 30) Sugitani M, Sheikh A, Suzuki K, Kinukawa N, Moriyama M, Arakawa Y, Komiyama K, Li TC, Takeda N, Ishaque SM, Roy PK, Raihan AS, Hasan M: Sero-epidemiology of sporadic acute hepatitis in Bangladesh: high prevalences of infection with type-B, type-E and multiple types of hepatitis virus. *Ann Trop Med Parasitol* 103: 343-50, 2009.
- 31) Hazari S, Chandra PK, Poat B, Datta S, Garry RF, Foster TP, Kousoulas G, Wakita T, Dash S. Impaired antiviral activity of interferon alpha against hepatitis C virus 2a in Huh-7 cells with a defective Jak-Stat pathway. *Virol J*. 7(1): 36, 2010.
- 32) Ishibashi M, Wakita T, Esumi M. 2',5'-Oligoadenylate synthetase-like gene highly induced by hepatitis C virus infection in human liver is inhibitory to viral replication in vitro. *Biochem Biophys Res Commun*. 392(3): 397-402, 2010.
- 33) Liu X, Wang T, Wakita T, Yang W. Systematic identification of microRNA and messenger RNA profiles in hepatitis C virus-infected human hepatoma cells. *Virology*. 398(1): 57-67, 2010.
- 34) Angus AG, Dalrymple D, Boulant S, McGivern DR, Clayton RF, Scott MJ, Adair R, Graham S, Owsianka AM, Targett-Adams P, Li K, Wakita T, McLauchlan J, Lemon SM, Patel AH. Requirement of cellular DDX3 for hepatitis C virus replication is unrelated to its interaction with the viral core protein. *J Gen Virol*. 91(1): 122-32, 2010.
- 35) Seronello S, Ito C, Wakita T, Choi J. Ethanol enhances hepatitis C virus replication through lipid metabolism and elevated NADH/NAD⁺. *J Biol Chem*. 285(2): 845-54, 2010.
- 36) Abe K, Ikeda M, Ariumi Y, Dansako H, Wakita T, Kato N. HCV genotype 1b chimeric replicon with NS5B of JFH-1 exhibited resistance to cyclosporine A. *Arch Virol*. 154 (10): 1671-7, 2009.
- 37) Hiraga N, Imamura M, Hatakeyama T, Kitamura S, Mitsui F, Tanaka S, Tsuge M, Takahashi S, Abe H, Maekawa T, Ochi H, Tateno C, Yoshizato K, Wakita T, Chayama K. Absence of viral interference and different susceptibility to interferon

- between hepatitis B virus and hepatitis C virus in human hepatocyte chimeric mice. *J Hepatol.* 51(6): 1046-54, 2009.
- 38) Kato N, Mori K, Abe KI, Dansako H, Kuroki M, Ariumi Y, Wakita T, Ikeda M. Efficient replication systems for hepatitis C virus using a new human hepatoma cell line. *Virus Res.* 146(1-2): 41-50, 2009.
- 39) Tanida I, Fukasawa M, Ueno T, Kominami E, Wakita T, Hanada K. Knockdown of autophagy-related gene decreases the production of infectious hepatitis C virus particles. *Autophagy.* 5(7): 937-45, 2009.
- 40) Murakami Y, Noguchi K, Yamagoe S, Suzuki T, Wakita T, Fukazawa H. Identification of bisindolylmaleimides and indolocarbazoles as inhibitors of HCV replication by tube-capture-RT-PCR. *Antiviral Res.* 83(2): 112-7, 2009.
- 41) Kang JI, Kim JP, Wakita T, Ahn BY. Cell culture-adaptive mutations in the NS5B gene of hepatitis C virus with delayed replication and reduced cytotoxicity. *Virus Res.* 144(1-2): 107-16, 2009.
- 42) Dansako H, Ikeda M, Ariumi Y, Wakita T, Kato N. Double-stranded RNA-induced interferon-beta and inflammatory cytokine production modulated by hepatitis C virus serine proteases derived from patients with hepatic diseases. *Arch Virol.* 154(5): 801-10, 2009.
- 43) Weng L, Du J, Zhou J, Ding J, Wakita T, Kohara M, Toyoda T. Modification of hepatitis C virus 1b RNA polymerase to make a highly active JFH1-type polymerase by mutation of the thumb domain. *Arch Virol.* 154(5): 765-73, 2009.
- 44) Park CY, Jun HJ, Wakita T, Cheong JH, Hwang SB. Hepatitis C virus nonstructural 4B protein modulates sterol regulatory element-binding protein signaling via the AKT pathway. *J Biol Chem.* 3:284(14): 9237-46, 2009.