

2. Department of Virology II

- 1) Ando T, Imamura H, Suzuki R, Aizaki H, Watanabe T, Wakita T, Suzuki T. Visualization and measurement of ATP levels in living cells replicating hepatitis C virus genome RNA. *PLoS Pathog.* 2012;8(3):e1002561.
- 2) Arita M, Wakita T, Shimizu H. Valosin containing protein (VCP/p97) is required for poliovirus replication and involved in cellular protein secretion pathway in poliovirus infection. *J Virol* 86(10): 5541-53, 2012.
- 3) Date T, Kato T, Kato J, Takahashi H, Morikawa K, Akazawa D, Murayama A, Tanaka-Kaneko K, Sata T, Tanaka Y, Mizokami M and Wakita T. Novel cell culture-adapted genotype 2a hepatitis C virus infectious clone. *J Virol*, 86 (19): 10805-20, 2012.
- 4) Date T, Morikawa K, Tanaka Y, Tanaka-Kaneko K, Sata T, Mizokami M, Wakita T. Replication and infectivity of a novel genotype 1b hepatitis C virus clone. *Microbiol Immunol.* 2012. 56(5):308-17.
- 5) Fujii Y, Kitaura K, Matsutani T, Shirai K, Suzuki S, Takasaki T, Kumagai K, Kametani Y, Shiina T, Takabayashi S, Katoh H, Hamada Y, Kurane I, Suzuki R: Immune-Related Gene Expression Profile in Laboratory Common Marmosets Assessed by an Accurate Quantitative Real-Time PCR Using Selected Reference Genes. *PLoS ONE* 2013, 8(2): e56296.
- 6) Fujii Y, Shimoike T, Takagi H, Murakami K, Todaka-Takai R, Park Y, Katayama K: Amplification of all 11 RNA segments of group A rotavirus based on reverse transcription polymerase chain reaction. *Microbiol Immunol.* 2012, 56:630-8
- 7) Fukazawa H, Suzuki T, Wakita T, Murakami Y. A cell-based, microplate colorimetric screen identifies 7,8-benzoflavone and green tea gallate catechins as inhibitors of the hepatitis C virus. *Biol Pharm Bull.* 2012;35(8):1320-7.
- 8) Fukuhara M, Iwami S, Sato K, Nishimura Y, Shimizu H, Aihara K, Koyanagi Y. Quantification of the dynamics of enterovirus 71 infection by experimental-mathematical investigation. *J Virol* 87(1): 701-5, 2013.
- 9) Hansman GS, DW. Taylor, JS. McLellan, TJ Smith, I Georgiev, JRH Tame, S-Y Park, M Yamazaki, F Gondaira, M Miki, K Katayama, K Murata, PD. Kwong. Structural Basis for Broad Detection of Genogroup II Noroviruses by a Monoclonal Antibody That Binds to a Site Occluded in the Viral Particle *Journal of virology* vol. 86, 3635-46, 2012.
- 10) Harada S, Oka T, Tokuoka E, Kiyota N, Nishimura K, Shimada Y, Ueno T, Ikezawa S, Wakita T, Wang Q, Saif LJ, Katayama K. A confirmation of sapovirusre-infection gastroenteritis cases with different genogroups and genetic shifts in the evolving sapovirus genotypes, 2002-2011. *Arch Virol.* 2012 157(10):1999-2003.
- 11) Ishii K, Kiyohara T, Yoshizaki S, Wakita T, Shimada T, Nakamura N, Nakashima K, Tada Y, Noda M. Epidemiological and genetic analyses of a diffuse outbreak of hepatitis A in Japan, 2010. *J Clin Virol.* 2012 53, 219-24.
- 12) Ishii K, Li TC, Yoshizaki S, Shiota T, Kato T, Takeda N. Wakita T. Cloning of permissive and nonpermissive human hepatoma cell lines for hepatitis E virus infection. *Hepatology*

- International. 6: 292 (2012)
- 13) Ishii K, Miyamura T, Kanda T, Tawada A, Sekimoto T, Wu S, Nakamoto S, Arai M, Fujiwara K, Imazeki F, Kiyohara T, Wakita T, Yokosuka O. Possible widespread presence of hepatitis A virus subgenotype IIIA in Japan: recent trend of hepatitis A causing acute liver failure. *Hepatology Research*, 42: 248-53 (2012)
 - 14) Jariyapong P, Xing L, van Houten NE, Li TC, Weerachatanukul W, Hsieh B, Moscoso CG, Chen CC, Niikura M, Cheng RH. Chimeric hepatitis E virus-like particle as a carrier for oral-delivery. *Vaccine*. 2013, 31:417-24
 - 15) Kanda T, Wu S, Kiyohara T, Nakamoto S, Jiang X, Miyamura T, Imazeki F, Ishii K, Wakita T, Yokosuka O. Interleukin-29 suppresses hepatitis A and C viral internal ribosomal entry site-mediated translation. *Viral Immunol*. 2012 25(5):379-86.
 - 16) Kato K, Yazawa T, Taki K, Mori K, Wang S, Nishioka T, Hamaguchi T, Itoh T, Takenawa T, Kataoka C, Matsuura Y, Amano M, Murohara T, Kaibuchi K. The inositol 5-phosphatase SHIP2 is an effector of RhoA and is involved in cell polarity and migration. *Mol Biol Cell* 23(13): 2593-604, 2012.
 - 17) Khamrin P, Chaimongkol N, Malasao R, Suantai B, Saikhruang W, Kongsricharoern T, Ukarapol N, Okitsu S, Shimizu H, Hayakawa S, Ushijima H, Maneekarn N. Detection and molecular characterization of cosavirus in adults with diarrhea, Thailand. *Virus Genes* 44 (2): 244-6, 2012.
 - 18) Khamrin P, Thongprachum A, Kikuta H, Yamamoto A, Nishimura S, Sugita K, Baba T, Kobayashi M, Okitsu S, Hayakawa S, Shimizu H, Maneekarn N, Ushijima H. Three clusters of Saffold viruses circulating in children with diarrhea in Japan. *Infect Genet Evol* 13 (Jan): 339-43, 2013.
 - 19) Khamrin P, Thongprachum A, Shimizu H, Okitsu S, Mizuguchi M, Hayakawa S, Maneekarn N, Ushijima H. Detection of human bocavirus 1 and 2 from children with acute gastroenteritis in Japan. *J Med Virol* 84 (6): 901-5, 2012.
 - 20) Kitamoto N, Oka T, Katayama K, Li TC, Takeda N, Kato Y, Miyoshi T, Tanaka T. Novel monoclonal antibodies broadly reactive to human recombinant sapovirus-like particles. *Microbiol Immunol*. 2012 56 (11):760-770.
 - 21) Kitaura K, Fujii Y, Matsutani T, Shirai K, Suzuki S, Takasaki T, Shimada S, Kametani Y, Shiina T, Takabayashi S, Katoh H, Ogasawara K, Kurane I, Suzuki R: A new method for quantitative analysis of the T cell receptor V region repertoires in healthy common marmosets by microplate hybridization assay. *J Imm Method* 2012, 384:81-91
 - 22) Kobayashi F, Yamada S, Taguwa S, Kataoka C, Naito S, Hama Y, Tani H, Matsuura Y, Sugahara K. Specific interaction of the envelope glycoproteins E1 and E2 with liver heparan sulfate involved in the tissue tropism interaction by hepatitis C virus. *Glycoconj J* 29(4): 211-20, 2012.
 - 23) Koma T, Yoshimatsu K, Yasuda SP, Li TC, Amada T, Shimizu K, Isozumi R, Mai LT, Hoa NT, Nguyen V, Yamashiro T, Hasebe F, Arikawa J. A survey of rodent-borne pathogens carried by wild *Rattus* spp. in Northern Vietnam. *Epidemiology and Infection*. *Epidemiol Infect*. 2012 1:1-9.
 - 24) Kubota T, Kumagai A, Ito H, Furukawa S, Someya Y, Takeda N, Ishii K, Wakita T, Narimatsu H, Shirato H. Structural basis for the

- recognition of Lewis antigens by genogroup I norovirus. *J Virol*. 2012 86(20):11138-50.
- 25) Kuroki M, Ariumi Y, Hijikata M, Ikeda M, Dansako H, Wakita T, Shimotohno K, Kato N. PML tumor suppressor protein is required for HCV production. *Biochem Biophys Res Commun*. 2013 430(2):592-7.
- 26) Law JL, Chen C, Wong J, Hockman D, Santer DM, Frey SE, Belshe RB, Wakita T, Bukh J, Jones CT, Rice CM, Abrignani S, Tyrrell DL, Houghton M. A Hepatitis C Virus (HCV) Vaccine Comprising Envelope Glycoproteins gpE1/gpE2 Derived from a Single Isolate Elicits Broad Cross-Genotype Neutralizing Antibodies in Humans. *PLoS One*. 2013;8(3):e59776.
- 27) Li TC, Ami Y, Suzaki Y, Yasuda S, Yoshimatsu K, Arikawa J, Takeda N, and Wakita T. Full-Genome Characterization of a Rat Hepatitis E Virus Strain Isolated in Vietnam. *EID*. 2013 19(1):115-8.
- 28) Li TC, Yoshizaki S, Ami Y, Suzaki Y, Yasuda SP, Yoshimatsu K, Arikawa J, Takeda N, Wakita T. Susceptibility of laboratory rats against genotypes 1, 3, 4, and rat hepatitis E viruses. *Vet Microbiol*. 2013, 163:54-61.
- 29) Li Y, Yoshida H, Wang L, Tao Z, Wang H, Lin X, Xu A. An optimized method for elution of enteroviral RNA from a cellulose-based substrate. *J Virol Methods* 186 (1-2) : 62-7, 2012.
- 30) Liu HM, Aizaki H, Machida K, Ou JH, Lai MM. Hepatitis C virus translation preferentially depends on active RNA replication. *PLoS One*. 7:e43600, 2012.
- 31) Matsuhira T, Kaji C, Murakami S, Maebashi K, Oka T, Takeda N, Katayama K. Evaluation of four antiseptics using a novel murine norovirus. *Exp Anim*. vol. 61, 35-40, 2012.
- 32) Oka T, Mori K, Iritani N, Harada S, Ueki Y, Iizuka S, Mise K, Murakami K, Wakita T, Katayama K. Human sapovirus classification based on complete capsid nucleotide sequences. *Arch Virol*, vol157, 349-52, 2012.
- 33) Matsumura T, Kato T, Sugiyama N, Tasaka-Fujita M, Murayama A, Masaki T, Wakita T and Imawari M. 25-hydroxyvitamin D(3) suppresses hepatitis C virus. *Hepatology*, 56 (4): 1231-9, 2012.
- 34) Miyamoto S, Inoue H, Nakamura T, Yamada M, Sakamoto C, Urata Y, Okazaki T, Marumoto T, Takahashi A, Takayama K, Nakanishi Y, Shimizu H Tani K. Coxsackievirus B3 is an oncolytic virus with immunostimulatory properties that is active against lung adenocarcinoma. *Cancer Res* 72 (10): 2609-21, 2012.
- 35) Miki M, Katayama K. *In silico* 3D structure analysis accelerates the solution of a real viral structure and antibodies docking mechanism. *Frontiers in Microbiology* 3: Article 387, 1-6, 2012
- 36) Murakami Y, Fukasawa M, Kaneko Y, Suzuki T, Wakita T, Fukazawa H. Selective estrogen receptor modulators inhibit hepatitis C virus infection at multiple steps of the virus life cycle. *Microbes Infect*. 2013 15(1):45-55.
- 37) Murayama A, Sugiyama N, Watashi K, Masaki T, Suzuki R, Aizaki H, Mizuoichi T, Wakita T and Kato T. Japanese reference panel of blood specimens for evaluation of hepatitis C virus RNA and core antigen quantitative assays. *J Clin Microbiol*, 50 (6): 1943-9, 2012.
- 38) Murayama A, Sugiyama N, Yoshimura S, Ishihara-Sugano M, Masaki T, Kim S, Wakita T, Mishiro S and Kato T. A subclone of HuH-7 with enhanced intracellular hepatitis C

- virus production and evasion of virus related-cell cycle arrest. *PLoS ONE*. 7 (12): e52697, 2012.
- 39) Nakajima N, Kitamori Y, Ohnaka S, Mitoma Y, Mizuta K, Wakita T, Shimizu H, Arita M. Development of a Transcription-Reverse Transcription Concerted Reaction Method for Specific Detection of Human Enterovirus 71 from Clinical Specimens. *J Clin Microbiol* 50(5): 1764-8, 2012.
- 40) Nakamura T, Ichinose H, Wariishi H. Flavin-containing monooxygenases from *Phanerochaete chrysosporium* responsible for fungal metabolism of phenolic compounds. *Biodegradation* 23 (3): 343-50, 2012.
- 41) Rau SJ, Hildt E, Himmelsbach K, Thimme R, Wakita T, Blum HE, Fischer R. CD40inhibits replication of hepatitis C virus in primary human hepatocytes by c-Jun N terminal kinase activation independent from the interferon pathway. *Hepatology*. 2013 57(1):23-36.
- 42) Saeed M, Gondeau C, Hmwe S, Yokokawa H, Date T, Suzuki T, Kato T, Maurel P and Wakita T. Replication of Hepatitis C Virus Genotype 3a in Cultured Cells. *Gastroenterology*, 144 (1): 56-8, 2012.
- 43) Sekiguchi S, Kimura K, Chiyo T, Ohtsuki T, Tobita Y, Tokunaga Y, Yasui F, Tsukiyama-Kohara K, Wakita T, Tanaka T, Miyasaka M, Mizuno K, Hayashi Y, Hishima T, Matsushima K, Kohara M. Immunization with a recombinant vaccinia virus that encodes nonstructural proteins of the hepatitis C virus suppresses viral protein levels in mouse liver. *PLoS One*. 2012;7(12):e51656.
- 44) Sharp TM, SE Crawford, NJ Ajami, F Neill, RL Atmar, K Katayama, B Utama, MK Estes. Secretory pathway antagonism by calicivirus homologues of Norwalk virus nonstructural protein p22 is restricted to noroviruses. *Virology Journal* 2012, 9:181
- 45) Suzuki R, Saito K, Kato T, Shirakura M, Akazawa D, Ishii K, Aizaki H, Kanegae Y, Matsuura Y, Saito I, Wakita T, Suzuki T. Trans-complemented hepatitis C virus particles as a versatile tool for study of virus assembly and infection. *Virology*. 2012 432(1):29-38.
- 46) Takeda M, Ikeda M, Ariumi Y, Wakita T, Kato N. Development of hepatitis C virus production reporter-assay systems using two different hepatoma cell lines. *J Gen Virol*. 2012 93(Pt 7):1422-31.
- 47) Tao Z, Song Y, Wang H, Zhang Y, Yoshida H, Ji S, Xu A, Song L, Liu Y, Cui N, Ji F, Li Y, Chen P, Xu W. Intercity Spread of Echovirus 6 in Shandong Province, China: Application of Environmental Surveillance in Tracing Circulating Enteroviruses. *Appl Environ Microbiol* 78 (19): 6946-53, 2012.
- 48) Tominaga A, Kanda T, Akiike T, Komoda H, Ito K, Abe A, Aruga A, Kaneda S, Saito M, Kiyohara T, Wakita T, Ishii K, Yokosuka O, Sugiura N. Hepatitis A outbreak associated with a revolving sushi bar in Chiba, Japan: Application of molecular epidemiology. *Hepatol Res*. 2012 42(8):828-34.
- 49) Umeki S, Suzuki R, Ema Y, Shimojima M, Nishimura Y, Okuda M, Mizuno T. Anti-adhesive property of P-selectin glycoprotein ligand-1 (PSGL-1) due to steric hindrance effect. *J Cell Biochem* 114 (6): 1271-85, 2012.
- 50) Weng L, Kohara M, Wakita T, Shimotohno K, Toyoda T. Detergent-induced activation of the

hepatitis C virus genotype 1b RNA polymerase.
Gene. 2012 496(2):79-87.

- 51) Weng L, Tian X, Gao Y, Watashi K, Shimotohno K, Wakita T, Kohara M, Toyoda T. Different mechanisms of hepatitis C virus RNA polymerase activation by cyclophilin A and B in vitro. *Biochim Biophys Acta*. 2012 1820(12):1886-92.
- 52) Wong KT, Ng KY, Ong KC, Ng WF, Shankar SK, Mahadevan A, Radotra B, Su JI, Lau G, Ling AE, Chan KP, Macorelles P, Desai AS, Ravi V, Nagata N, Shimizu H, Takasaki T. Enterovirus 71 encephalomyelitis and Japanese encephalitis can be distinguished by topographic distribution of inflammation and specific intraneuronal detection of viral antigen and RNA in the central nervous system. *Neuropathology and Applied Neurobiology* 38 (5): 443-53. 2012.
- 53) Yamamoto H, Suzuki J, Matsuda A, Ishida T, Ami Y, Suzaki Y, Adachi I, Wakita T, Takeda N, Li TC. Hepatitis E Outbreak in Monkey Facility, Japan. *EID* 2012, 18 (12) 2032-4.
- 54) Yokoyama M, Oka T, Kojima H, Nagano T, Okabe T, Katayama K, Wakita T, Kanda T, Sato H. Structural basis for specific recognition of substrates by sapovirus protease. *Frontiers in Microbiology* 3: Article 312, 1-10, 2012.