

Publications

Recent Publications (*sole corresponding author)

Le Bert N, Tan AT, Kunasegaran K, Tham CYL, Hafezi M, Chia A, Chng MHY, Lin M, Tan N, Linster M, Chia WN, Chen MI, Wang LF, Ooi EE, Kalimuddin S, Tambyah PA, Low JG, Tan YJ, Bertoletti A.

SARS-CoV-2-specific T cell immunity in cases of COVID-19 and SARS, and uninfected controls.

Nature. 2020 Jul 15. doi: 10.1038/s41586-020-2550-z. Online ahead of print

Zheng Z, Monteil VM, Maurer-Stroh S, Yew CW, Leong C, Mohd-Ismail NK, Cheyyatraivendran Arularasu S, Chow VTK, Lin RTP, Mirazimi A, Hong W, Tan YJ*. Monoclonal antibodies for the S2 subunit of spike of SARS-CoV cross-react with the newlyemerged SARS-CoV-2.

Euro Surveill. 2020 Jul;25(28).

Tan CW, Chia WN, Qin X, Liu P, Chen MI, TiuC, HuZ, Chen, VCW, Young BE, Sia WR, Tan YJ, Foo R, Yi Y, Lye DC, Anderson DE, Wang LF.

A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE2–spike protein–protein interaction.

Nat Biotechnol (2020). <https://doi.org/10.1038/s41587-020-0631-z>

Anderson DE, Tan CW, Chia WN, Young BE, Linster M, Low JH, Tan YJ, Chen MI, Smith GJD, Leo YS, Lye DC, Wang LF.

Lack of cross-neutralization by SARS patient sera towards SARS-CoV-2.

Emerg Microbes Infect. 2020 Dec;9(1):900-902.

Chia WN, Tan CW, Foo R, Kang AEZ, Peng Y, Sivalingam V, Tiu C, Ong XM, Zhu F, Young BE, Chen MI, Tan YJ, Lye DC, Anderson DE, Wang LF.

Serological differentiation between COVID-19 and SARS infections.

Emerg Microbes Infect. 2020 Dec;9(1):1497- 1505.

Stebbing J, Krishnan V, de Bono S, Ottaviani S, Casalini G, Richardson PJ, Monteil V, Lauschke VM, Mirazimi A, Youhanna S, Tan YJ, Baldanti F, Sarasini A, Terres JAR, Nickoloff BJ, Higgs RE, Rocha G, Byers NL, Schlichting DE, Nirula A, Cardoso A, Corbellino M; Sacco Baricitinib Study Group.

Mechanism of baricitinib supports artificial intelligence-predicted testing in COVID-19

patients.

EMBO Mol Med. 2020 May 30:e12697.

Niu X, Yan Q, Yao Z, Zhang F, Qu L, Wang C, Wang C, Lei H, Chen C, Liang R, Luo J, Wang Q, Zhao L, Zhang Y, Luo K, Wang L, Wu H, Liu T, Li P, Zheng Z, Tan YJ, Feng L, Zhang Z, Han J, Zhang F, Chen L.

Longitudinal analysis of the antibody repertoire of a Zika virus-infected patient revealed dynamic changes in antibody response.

Emerg Microbes Infect. 2020 Jan 6;9(1):111-123.

Zheng Z, Teo SHC, Arularasu SC, Liu Z, Mohd-Ismail NK, Mok CK, Ong CB, Chu JJ, Tan YJ*.

Contribution of Fc-dependent cell-mediated activity of a vestigial esterase-targeting antibody against H5N6 virus infection.

Emerg Microbes Infect. 2020 Dec;9(1):95-110

Zhang F, Wang L, Niu X, Li J, Luo J, Feng Y, Yang Y, He P, Fan W, Liang R, Zheng Z, Pan W, Li C, Tan YJ, Yu H, Chen L, Li P.

Phenotypic Characterization of Chinese Rhesus Macaque Plasmablasts for Cloning Antigen-Specific Monoclonal Antibodies.

Front Immunol. 2019 Oct 11;10:2426

Mohd-Ismail NK, Lim Z, Gunaratne J, Tan YJ*.

Mapping the Interactions of HBV cccDNA with Host Factors.

Int J Mol Sci. 2019 Sep 1;20(17). pii: E4276.

Teo SHC, Wu JP, Mok CK, Tan YJ*.

A NS1-binding monoclonal antibody interacts with two residues that are highly conserved in seasonal as well as newly emerged influenza A virus.

Pathog Dis. 2019 Feb 1;77(1). pii: ftz012.

Xu Y, Victorio CBL, Meng T, Jia Q, Tan YJ#, Chua KB#.

The Saffold Virus-Penang 2B and 3C Proteins, but not the L Protein, Induce Apoptosis in HEp-2 and Vero Cells.

Virol Sin. 2019 Jun;34(3):262-269. (#co-corresponding authors).

Aboagye JO, Yew CW, Ng OW, Monteil VM, Mirazimi A, Tan YJ*.

Overexpression of the nucleocapsid protein of Middle East respiratory syndrome coronavirus up-regulates CXCL10.

Biosci Rep. 2018 Oct 17;38(5).

Zheng Z, Paul SS, Mo X, Yuan YA, Tan YJ*.

The Vestigial Esterase Domain of Haemagglutinin of H5N1 Avian Influenza A Virus: Antigenicity and Contribution to Viral Pathogenesis.

Vaccines. 2018 Aug 10;6(3). pii: E53.

Franz KM, Neidermyer WJ, Tan YJ, Whelan SPJ, Kagan JC.

STING-dependent translation inhibition restricts RNA virus replication.

Proc Natl Acad Sci U S A. 2018 Feb 27;115(9):E2058-E2067.

Zheng Z, Sze CW, Keng CT, Al-Haddawi M, Liu M, Tan SY, Kwek HL, Her Z, Chan XY, Barnwal B, Loh E, Chang KTE, Tan TC, Tan YJ#, Chen Q#.

Hepatitis C virus mediated chronic inflammation and tumorigenesis in the humanised immune system and liver mouse model.

PLoS One. 2017 Sep 8;12(9):e0184127. (#co-corresponding authors).

Francisco JC, Dai Q, Luo Z, Wang Y, Chong RH, Tan YJ, Xie W, Lee GH, Lin C.

Transcriptional Elongation Control of Hepatitis B Virus Covalently Closed Circular DNA Transcription by Super Elongation Complex and BRD4.

Mol Cell Biol. 2017 Sep 12;37(19). pii: e00040-17.

Paul SS, Mok CK, Mak TM, Ng OW, Aboagye JO, Wohlbold TJ, Krammer F, Tan YJ*.

A cross-clade H5N1 influenza A virus neutralizing monoclonal antibody binds to a novel epitope within the vestigial esterase domain of hemagglutinin.

Antiviral Res. 2017 Aug;144:299-310.

Xu Y, Victorio CB, Ng Q, Prabakaran M, Tan YJ#, Chua KB#.

Intracellular localization of Saffold virus Leader (L) protein differs in Vero and HEp-2 cells.

Emerg Microbes Infect. 2016 Oct 12;5(10):e109. (# co-corresponding authors)

Ng OW, Tan YJ*.

Understanding bat SARS-like coronaviruses for the preparation of future coronavirus outbreaks - Implications for coronavirus vaccine development.

Hum Vaccin Immunother. 2017 Jan 2;13(1):186-189.

Wu J, Mok CK, Chow VT, Yuan YA, Tan YJ*.

Biochemical and structural characterization of the interface mediating interaction between the influenza A virus non-structural protein-1 and a monoclonal antibody.

Sci Rep. 2016 Sep 16;6:33382.

Keng CT, Sze CW, Zheng D, Zheng Z, Yong KS, Tan SQ, Ong JJ, Tan SY, Loh E, Upadhyay MH, Kuick CH, Hotta H, Lim SG, Tan TC, Chang KT, Hong W, Chen J, Tan YJ#, Chen Q#. Characterisation of liver pathogenesis, human immune responses and drug testing in a humanised mouse model of HCV infection.

Gut. 2016 Oct;65(10):1744-53. (#cocorresponding authors)

Tan CT, Zhou QL, Su YC, Fu NY, Chang HC, Tao RN, Sukumaran SK, Baksh S, Tan YJ, Sabapathy K, Yu CD, Yu VC.

MOAP-1 Mediates Fas-Induced Apoptosis in Liver by Facilitating tBid Recruitment to Mitochondria.

Cell Rep. 2016 Jun 28;16(1):174-185.

Ng OW, Chia A, Tan AT, Jadi RS, Leong HN, Bertoletti A, Tan YJ*.

Memory T cell responses targeting the SARS coronavirus persist up to 11 years post-infection.

Vaccine. 2016 Apr 12;34(17):2008-14.

Klionsky DJ, ... Tan YJ ... Zughaiyer SM.

Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition).

Autophagy. 2016;12(1):1-222.

Suzuki Y, Chin WX, Han Q, Ichiyama K, Lee CH, Eyo ZW, Ebina H, Takahashi H, Takahashi C, Tan BH, Hishiki T, Ohba K, Matsuyama T, Koyanagi Y, Tan YJ, Sawasaki T, Chu JJ, Vasudevan SG, Sano K, Yamamoto N.

Characterization of RyDEN (C19orf66) as an Interferon-Stimulated Cellular Inhibitor against Dengue Virus Replication.

PLoS Pathog. 2016 Jan 6;12(1):e1005357.

Barnwal B, Karlberg H, Mirazimi A, Tan YJ*.

The Non-structural Protein of Crimean-Congo Hemorrhagic Fever Virus Disrupts the Mitochondrial Membrane Potential and Induces Apoptosis.

J Biol Chem. 2016 Jan 8;291(2):582-92.

Lam S, Nyo M, Phuektes P, Yew CW, Tan YJ, Chu JJ.
A potent neutralizing IgM mAb targeting the N218 epitope on E2 protein protects against Chikungunya virus pathogenesis.
MAbs. 2015;7(6):1178-94.

Sze CW, Tan YJ*.
Viral Membrane Channels: Role and Function in the Virus Life Cycle.
Viruses. 2015 Jun 23;7(6):3261-84.

Bae KH, Lee F, Xu K, Keng CT, Tan SY, Tan YJ, Chen Q, Kurisawa M. Microstructured dextran hydrogels for burst-free sustained release of PEGylated protein drugs.
Biomaterials. 2015 Sep;63:146-57.

Barnwal B, Mok CK, Wu J, Diwakar MK, Gupta G, Zeng Q, Chow VT, Song J, Yuan YA, Tan YJ*.
A monoclonal antibody binds to threonine 49 in the non-structural 1 protein of influenza A virus and interferes with its ability to modulate viral replication.
Antiviral Res. 2015 Apr;116:55-61.

Karlberg H, Tan YJ#, Mirazimi A#.
Crimean-Congo haemorrhagic fever replication interplays with regulation mechanisms of apoptosis.
J Gen Virol. 2015 Mar;96(Pt 3):538-46. (#cocorresponding authors)

Aweya JJ, Sze CW, Bayega A, Mohd-Ismail NK, Deng L, Hotta H, Tan YJ*.
NS5B induces up-regulation of the BH3-only protein, BIK, essential for the hepatitis C virus RNA replication and viral release.
Virology. 2015 Jan 1;474:41-51.

Jiang, Y., Tan, Y.C., Yu, S, Wong, S.F., Chen, Y.F., Zhang, L., Yao, K., Gan, S.K.E., Verma, C. Tan YJ (2015)
SAW sensor for Influenza A virus detection enabled with efficient surface functionalization.
Sensors and Actuators B Chemical, 209:78-84.

Ng OW, Keng CT, Leung CS, Peiris JS, Poon LL, Tan YJ*.
Substitution at aspartic acid 1128 in the SARS coronavirus spike glycoprotein mediates escape from a S2 domain-targeting neutralizing monoclonal antibody.
PLoS One. 2014 Jul 14;9(7):e102415.

Mak TM, Hanson BJ, Tan YJ*.

Chimerization and characterization of a monoclonal antibody with potent neutralizing activity across multiple influenza A H5N1 clades.

Antiviral Res. 2014 Jul;107:76-83.

Upadya MH, Aweya JJ, Tan YJ*.

Understanding the interaction of hepatitis C virus with host DEAD-box RNA helicases.

World J Gastroenterol. 2014 Mar 21;20(11):2913-26.

Xu Y, Victorio CB, Ng Q, Tan YJ, Chua KB.

Saffold virus is able to productively infect primate and rodent cell lines and induces apoptosis in these cells.

Emerg Microbes Infect. 2014 Feb;3(2):e15.

International collaborations

1. Awarded a fellowship by the NUS-JSPS Scientist Exchange Programme (Research ID no. AP211095009) to be a visiting researcher in the Division of Infectious Disease Control, Kobe University Graduate School of Medicine, Kobe, Japan from 7 Jul 2010 to 14 Jul 2010. (Collaborator is Prof Hak Hotta)
2. Granted a sabbatical leave by NUS to be a visiting researcher at the Division of Clinical Microbiology, Department of Laboratory Medicine, Karolinska Institutet (KI) as well as the Public Health Agency of Sweden from 22 July 2017 to 30 September 2017. (Collaborator is Prof Ali Mirazimi)
3. Awarded a fellowship by the Chinese Academy of Sciences (CAS) President's International Fellowship Initiative to be a visiting scientist in the Guangzhou Institute of Biomedicine & Health, China for 2019. (Collaborator is Prof Ling Chen)