

# LVG GOLDEN SYRIAN HAMSTER

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Relevancy and Application in COVID-19 Research

# LVG GOLDEN SYRIAN HAMSTER

## An Excellent Model for SARS-CoV-2 Studies

### Why the LVG Hamster?

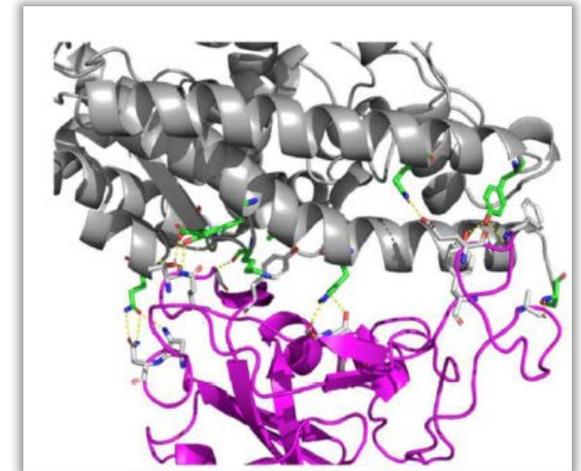
Supports growth of SARS-CoV-2 with robust viral titers within 2 days of inoculation. Ease of handling, natural infection, and efficient transmission make this an ideal research model for your COVID-19 studies.

### Relevant Features

- High level of sequence homology with human ACE 2 receptor
- Consistent infection with SARS-CoV-2
- Maximum clinical signs such as alveolar damage, high lung viral load, cytokine activation, spleen and lymphoid atrophy, and development of serum antibody

### Applications

- Investigation of pathogenesis and transmission of SARS-CoV-2
- Vaccine and treatment generation against SARS-CoV-2



Hydrogen bonds between ACE2 and the spike glycoprotein S1 subunit RBDs of SARS-CoV-2

*Clin Infect Dis.* 2020;ciaa325. doi:10.1093/cid/ciaa325

**FIRST REPORTED  
COVID-19 CASE  
(WHO)**

ACCEPTED MANUSCRIPT

## Simulation of the clinical and pathological manifestations of Coronavirus Disease 2019 (COVID-19) in golden Syrian hamster model: implications for disease pathogenesis and transmissibility <sup>FREE</sup>

Jasper Fuk-Woo Chan ✉, Anna Jinxia Zhang, Shuofeng Yuan, Vincent Kwok-Man Poon, Chris Chung-Sing Chan, Andrew Chak-Yiu Lee, Wan-Mui Chan, Zhimeng Fan, Hoi-Wah Tsoi, Lei Wen ... Show more  
Author Notes

Clinical Infectious Diseases, ciaa325, <https://doi.org/10.1093/cid/ciaa325>

Published: 26 March 2020 Article history ▾

New Results

[Comment on this paper](#)

## Rapid isolation of potent SARS-CoV-2 neutralizing antibodies and protection in a small animal model

Thomas F Rogers, Fangzhu Zhao, Deli Huang, Nathan Beutler, Alison Burns, Wan-ting He, Oliver Limbo, Chloe Smith, Ge Song, Jordan Woehl, Linlin Yang, Robert K Abbott, Sean Callaghan, Elijah Garcia, Jonathan Hurtado, Mara Parren, Linghang Peng, James Ricketts, Michael K Ricciardi, Stephen A Rawlings, Davey M Smith, David Nemazee, John R Teijaro, James E Voss, Raiees Andrabi, Bryan Briney, Elise Landais, Devin Sok, Joseph G Jardine, Dennis Burton

doi: <https://doi.org/10.1101/2020.05.11.088674>

This article is a preprint and has not been certified by peer review [what does this mean?].



**COVID-19 TIMELINE:  
LVG GOLDEN SYRIAN  
HAMSTER**

## Pathogenesis and transmission of SARS-CoV-2 virus in golden Syrian hamsters

Sia SF, Yan L, Chin AW, Fung K, Poon LL, Nicholls JM, Peiris M, Yen H

Preprint from Research Square, 31 Mar 2020

DOI: [10.21203/rs.3.rs-20774/v1](https://doi.org/10.21203/rs.3.rs-20774/v1) PPR: PPR138293

Preprint

⚠ This article is a preprint. It has not been peer-reviewed.



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## Attenuated SARS-CoV-2 variants with deletions at the S1/S2 junction

Siu-Ying Lau, Pui Wang, Bobo Wing-Yee Mok, Anna Jinxia Zhang, Hin Chu, Andrew Chak-Yiu Lee, Shaofeng Deng, Pin Chen, Kwok-Hung Chan, Wenjun Song, Zhiwei Chen, Kelvin Kai-Wang To, Jasper Fuk-Woo Chan, Kwok-Yung Yuen & Honglin Chen