

**Cite this as:** Sunjian LYU, Xuemei YUAN, Li LIU, Haiqi ZHANG, Zhe YU, Xiaoying HANG, Weida SHI, Yinglei WU, 2021. Application of a recombinant replicase to localize the *Trionyx sinensis* hemorrhagic syndrome virus and evaluate its effects on antiviral genes of *T. sinensis*. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)*, **22**(4):295-304.  
<https://doi.org/10.1631/jzus.B2000504>

# **Application of a recombinant replicase to localize the *Trionyx sinensis* hemorrhagic syndrome virus and evaluate its effects on antiviral genes of *T. sinensis***

**Key words: TSHSV, Replicase, Virus localization, Immune genes**



# ***Innovation points***

- **We found that this virus was highly localized in various cells, including intestinal lymphocytes, enterocytes, kidney epithelial cells, spleen cells, lung macrophages, and cardiomyocytes.**
- **We demonstrated that polyclonal antibody led to higher virus mRNA copies and expression of *MX2* and *RSAD2* than in those of virus group.**