

Research findings may lead to promising Zika virus drug targets

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Following recent outbreaks of Zika virus and the potential health dangers of infection, especially during pregnancy, scientists are striving to rapidly develop effective antiviral drugs that can halt transmission. Investigators who recently performed detailed analyses of the targets of a key enzyme of the Zika virus have uncovered peculiarities of the viral enzyme, called the NS3 protease.

A detailed understanding of how the NS3 protease binds to its targets might allow for the development of highly specific inhibitors with minimal effects on nonviral proteases.

"In our study we made a first step on the route to effective treatment. We believe that our data on NS3 substrate specificity, combined with the recent report on protein structure from other researchers, will allow for development of highly specific inhibitors in the future," said Dr. Krzysztof Pyr?, senior author of the *FEBS Letters* study. "Our hopes are further risen by success of the NS3?directed therapy of Zika's cousin, hepatitis C virus."

More information: *FEBS Letters*, <u>DOI: 10.1002/1873-3468.12443</u>

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