

Scientists of the Institute of Chemical Biology and Fundamental Medicine SB RAS in cooperation with Swedish colleagues synthesized five candidates for creating a medicine against Denge's fever. Currently, there is no specific drug for the treatment of this disease.

Denge's fever is common in countries with tropical and subtropical climate, but due to climate changes, its cases began to be recorded in the southern regions of Russia. The carrier of the virus is the mosquitoes of the genus *Aedes*. According to WHO estimates, from 100 to 400 million cases of infection occurs annually.

As the director of the institute, Vladimir Koval, explained the formations developed by protease inhibitors - molecules that block the splitting of proteins. All five substances are water-soluble, non-toxic and have high binding constants, which allows the use of small doses of the drug.

Studies are conducted in conjunction with the Institute of Bioorganic Chemistry of the Russian Academy of Sciences and the Swedish University of Agricultural Sciences. Scientists had previously been able to clarify the structure of the target protein-serine's protease, which is necessary for the virus for penetration into the cage.