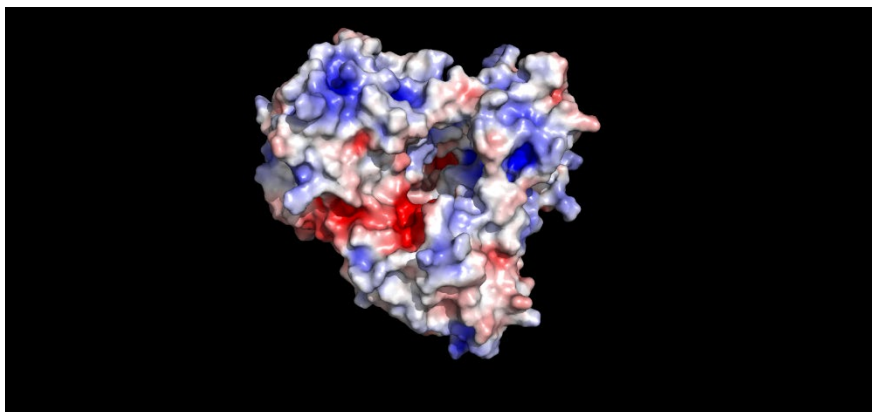


Technology Offer

CSIC/EG/131

## Compounds for the treatment of diseases caused by West Nile virus and Zika virus



**Compounds and its use for the treatment of diseases caused by RNA viruses, such as West Nile virus (WNV), Zika virus (ZIKV), among others.**

### Intellectual Property

Priority patent application

### Stage of development

Technology concept formulated

### Intended Collaboration

Licensing and/or co-development

### Contact

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### Market need

Highly pathogenic RNA viruses are the cause of zoonotic and epidemic diseases. Among them, Flaviviruses, transmitted by infected arthropods, represent a particularly relevant health challenge. They cause febrile illness and severe neurological diseases, including meningitis, encephalitis or microcephaly.

Due to the increasing impact of these infections and the absence of therapeutic drugs to treat them, it is mandatory to identify new drug candidates.



### CSIC solution

By combining target-based screening and in cell evaluation, a new series of compounds, with a non-nucleoside structure, has been identified and optimized to selectively inhibit WNV and ZIKV replication.

These compounds have shown a high barrier to resistance, a highly desirable property for antivirals.

### Competitive advantages

- These compounds have shown inhibition of the polymerase activity and antiviral activity against WNV and ZIKV in Vero cells.
- The compounds shown antiviral activity well below their cytotoxic concentrations.
- The compounds have a low molecular weight (<500) and are easily synthesized in just 2 to 5 steps.