

# Antiviral Activity Of Bismuth Compounds Against Dengue Virus Serotype 2

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- 3.9 billion people in 128 countries are at risk of dengue infection.

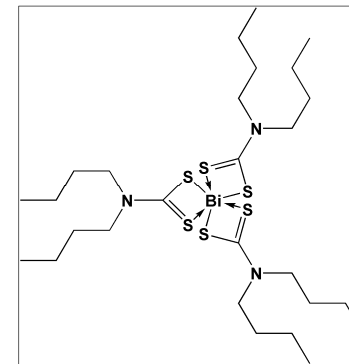
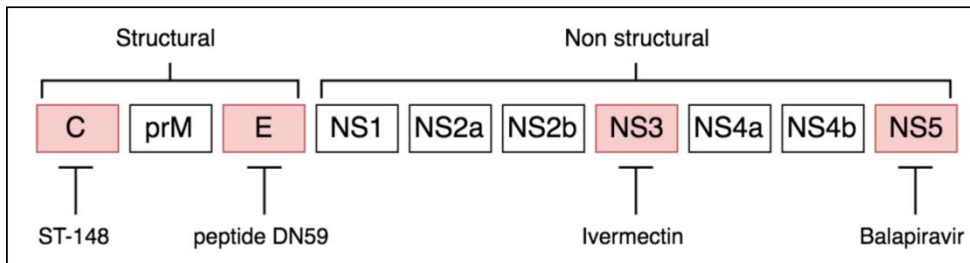
- Serotypes - DENV 1, 2, 3 and 4.

- Symptoms



- Vaccines (Dengvaxia, DenVax and TV003/005)

- Antivirals



Bismuth with active functional group

Antiviral assays

- 1) Foci reduction assay
- 2) Viral RNA copy number by qPCR



Attachment

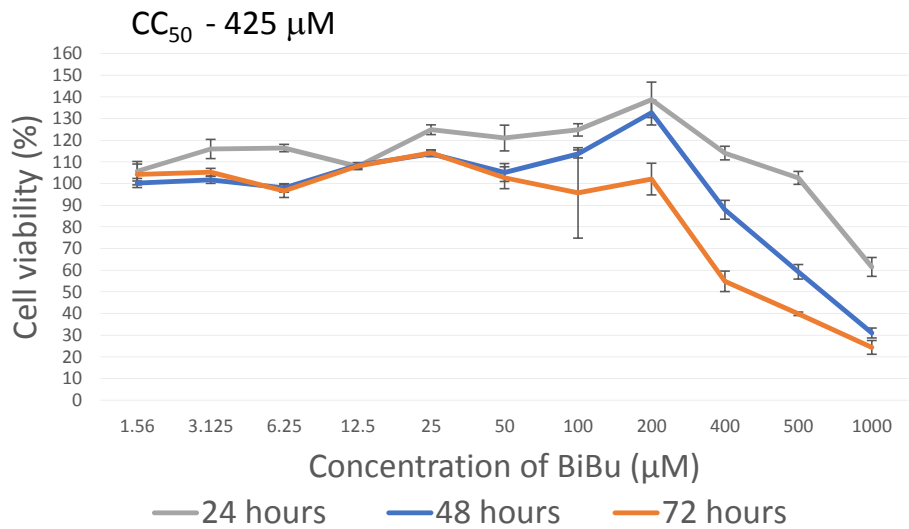


Post infection

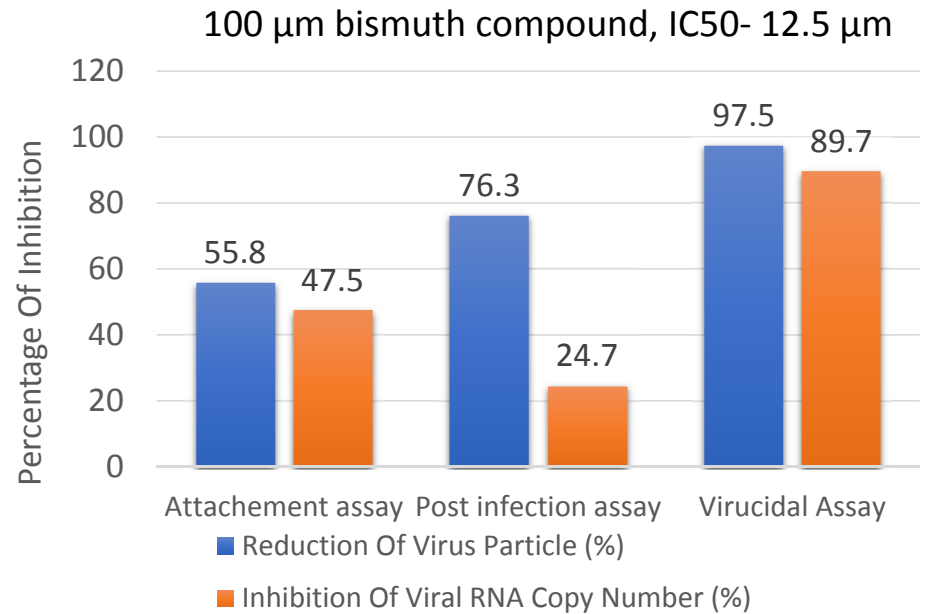


Virucidal

## Cytotoxicity assay of Bismuth Bu compound in Vero cells



## Antiviral Activity Of Bismuth Compound



Cell control    Virus control    Attachment    Post infection    Virucidal



## Conclusion

- Bismuth compound exhibited higher antiviral activity when directly treated with the virus.
- Identification of mode of action of the bismuth on virus replication by helicase - ATPase assay.

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