CLAIMS

1. An arbovirus particle comprising a mutated Arbovirus that replicates in insect cells and does not replicate in mammal cells, comprising a molecularly altered furin tetrapeptide cleavage site in a precursor polyprotein, and optionally, an alteration in a first stretch of amino acids upstream from said site and/or an alteration in a second stretch of amino acids downstream from said site.

2. The particle of claim 1, wherein said site comprises a consensus sequence of Arg-X-Lys/Arg-Arg (SEQ ID NO:16).

3. The particle of claim 2, wherein X comprises Arg.

4. The particle of claim 2, wherein said first stretch comprises eight amino acids adjacent to said site.

5. The particle of claim 2, comprising said alteration in said first stretch.

6. The particle of claim 2, comprising said alteration in said second stretch.

7. The particle of claim 1, wherein said polyprotein comprises prM.

8. The particle of claim 1, wherein said polyprotein comprises prE2.

9. The particle of claim 1, comprising a Dengue virus (DV).

10. The particle of claim 1, comprising a Zika virus (ZV).

11. A composition comprising the particle of claim 1 and a pharmaceutically acceptable carrier, diluent or excipient.

12. An insect cell comprising the particle of claim 1.

13. The cell of claim 12, where said insect comprises an arthropod.

14. The cell of claim 12, wherein said insect comprises a tick or a mosquito.

15. A mammal cell comprising the particle of claim 1.

16. The cell of claim 15, wherein said cell expresses a DV antigen.

17. The cell of claim 15, wherein said cell expresses a DV antigen at a surface of said cell.

18. The cell of claim 15, wherein said cell expresses a ZV antigen.

19. The cell of claim 15, wherein said cell expresses a ZV antigen at a surface of said cell.

20. The cell of claim 15, wherein said mammal cell comprises a human cell.

21. The particle of claim 1, further comprising said alteration in said first stretch of amino acids upstream from said site and/or said alteration in said second stretch of amino acids downstream from said site.