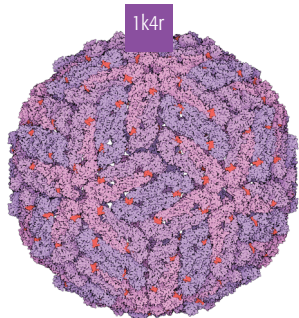


# Build a Paper Model of Dengue Virus



This paper model of PDB entry 1k4r shows the virus magnified by 1,500,000 times. The RNA genome, which contains 10,649 nucleotides, can be modeled using a piece of string approximately 5.4 meters long and placed inside of the structure.



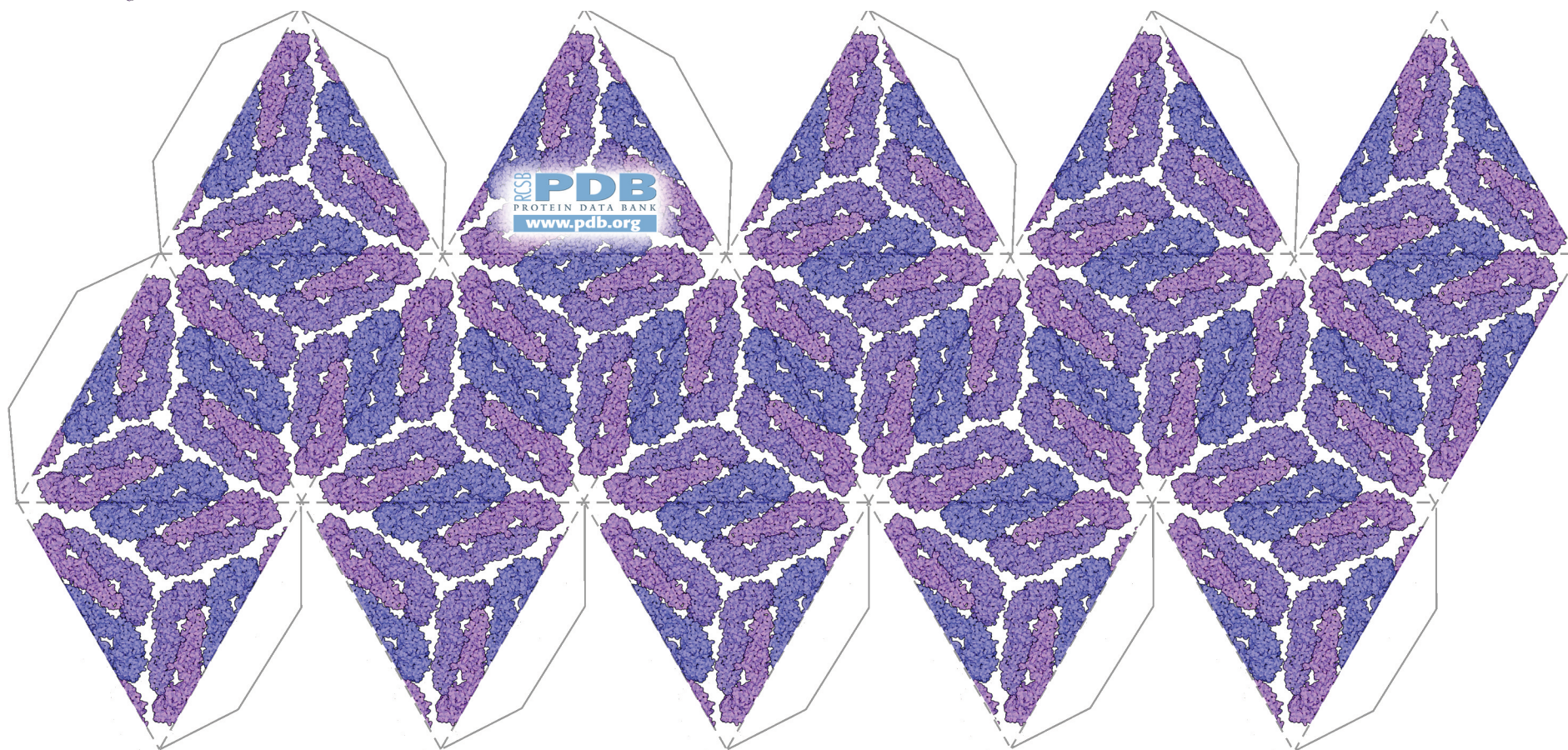
To build the dengue virus, **cut** out the protein structure below and **fold** along the dotted lines. Then **tape** or glue the flaps into place to form an icosahedron.



For more information about dengue virus, see the RCSB PDB's *Molecule of the Month* at [dx.doi.org/10.2210/rcsb\\_pdb/mom\\_2008\\_7](http://dx.doi.org/10.2210/rcsb_pdb/mom_2008_7)



To learn about dengue fever, see the National Institute of Allergy and Infectious Diseases' site at [www.niaid.nih.gov/topics/denguefever/](http://www.niaid.nih.gov/topics/denguefever/)



This image was created from the experimentally-determined coordinates available in the PDB archive.

**PDB ID: 1k4r:** R.J. Kuhn, W. Zhang, M.G. Rossmann, S.V. Pletnev, J. Corver, E. Lenches, C.T. Jones, S. Mukhopadhyay, P.R. Chipman, E.G. Strauss, T.S. Baker, J.H. Strauss (2002) Structure of dengue virus: implications for flavivirus organization, maturation, and fusion *Cell* 108:717-725