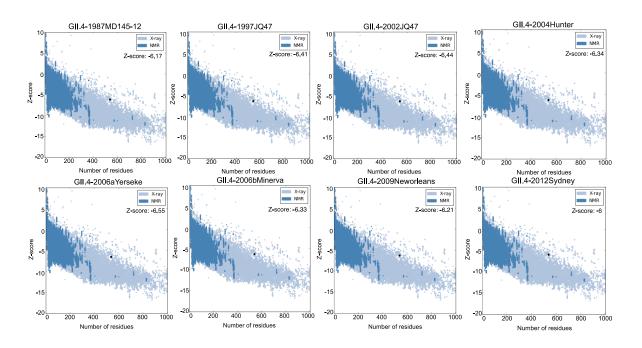
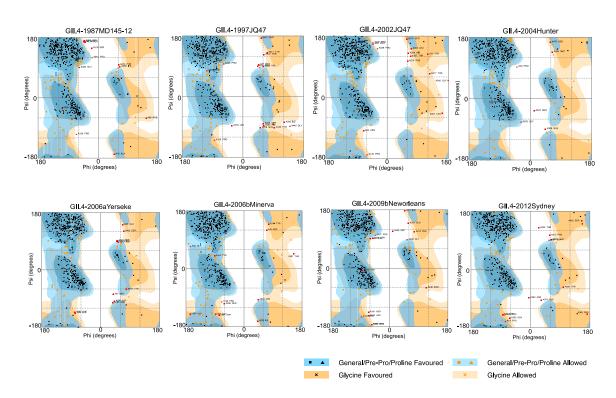
## **Supplementary Figure S1**



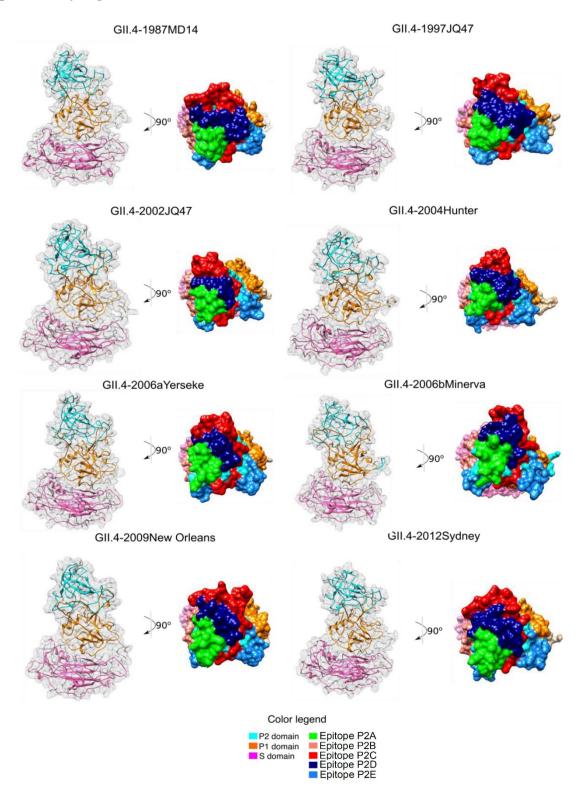
**Figure S1.** Scatter plots depict the modelled GII.4.VP1 structure validation by ProSA-web algorithm. The black dots reveals that all modeled structures falls within the series of scores found on related sized proteins with an X-ray quality.

## **Supplementary Figure S2**



**Figure S2.** The Ramachandran plots of GII.4.VP1 protein structure models from different years.

## **Supplementary Figure S3**



**Figure 3.** Three dimensional surface plots depicts the GII.4.VP1 structures color coded according to domain architecture (left side) and epitopes in P2 domain (right side).