**S1 Figure.** Ramachandran plot analysis of E6 and its variants from HPV-16. (A) E6-reference. (B) E-G350. (C) E-C188/G350. (D) E-A176/G350. (E) E6-AAa. (F) E6-AAc.

**S2 Figure**. Ramachandran plot of MAGI-I. (A) Ramachandran plot of MAGI-1 255 model from I-TASSER. (B) Ramchandran plot of I-TASSER model of MAGI-1 329.

S3 Figure . Ramachandran plot analysis of E6-reference and its variants after MD simulation. (A) E6-reference (D) For the E-G350. (E) variant E-C188/G350. (B) For E6-AAa (C) E6-AAc.

S4 Figure . Ramachandran plot analysis after 200 ns of MD simulation. (A) MAGI-I 255. (B) MAGI-1 329.