**Supplementary information**

**Biosynthesized Silver Nanoparticle (AgNP) from *Pandanus odorifer* exhibitsAnti-Metastasis and Anti-Biofilm Potentials**

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**Running title:** Anti-cancer and anti-biofilm properties of biosynthesized silver nanoparticles.

**Key words:** Silver nanoparticles (AgNPs), anti-metastasis, anti-biofilm, quorum sensing, molecular docking

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**Table S1. Quality assessment parameters of the predicted RhlR and PqsA models**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Protein** | **C-Score** | **Estimated TM-Score** | **Estimated RMSD (**Å**)** |
| **RhlR** | 1.23 | 0.88 ± 0.07 | 4.8 ± 3.1 |
| **PqsA** | 1.32 | 0.90 ± 0.06 | 3.1 ± 2.2 |

**Table S2. QMEAN assessment parameters for the modeled proteins**

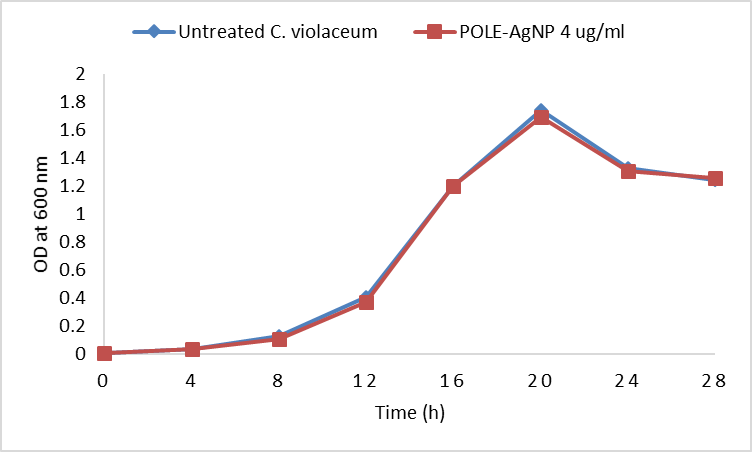
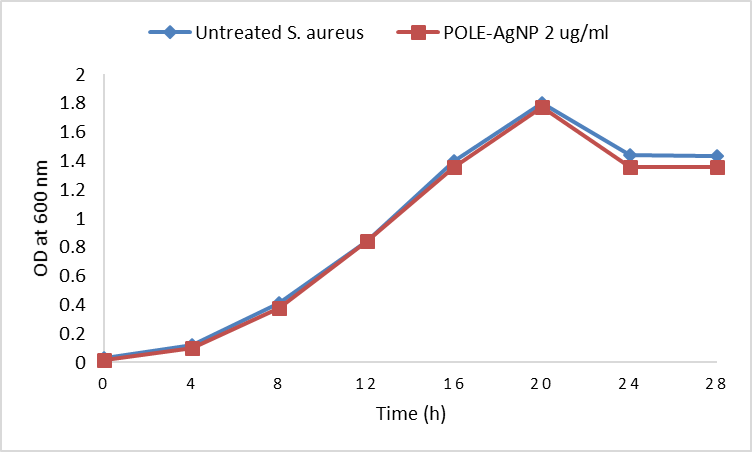
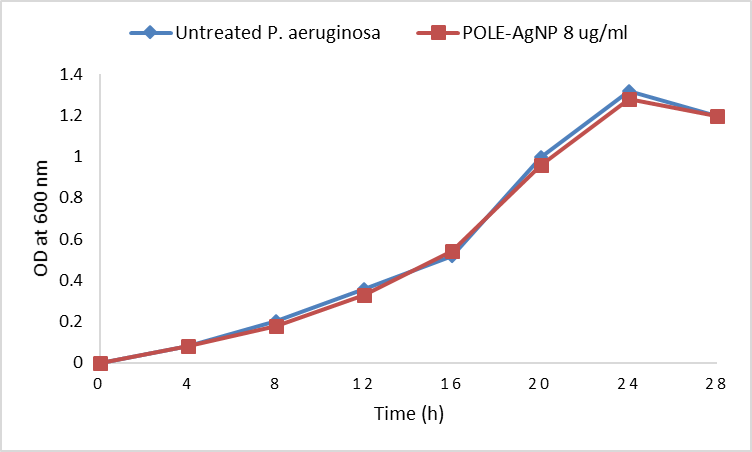
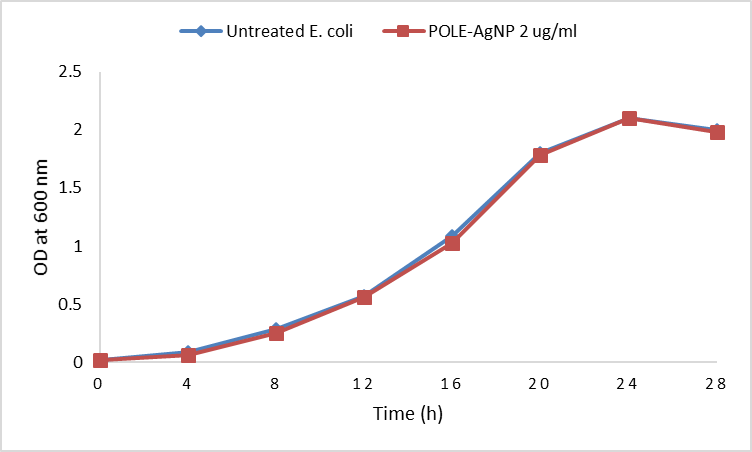
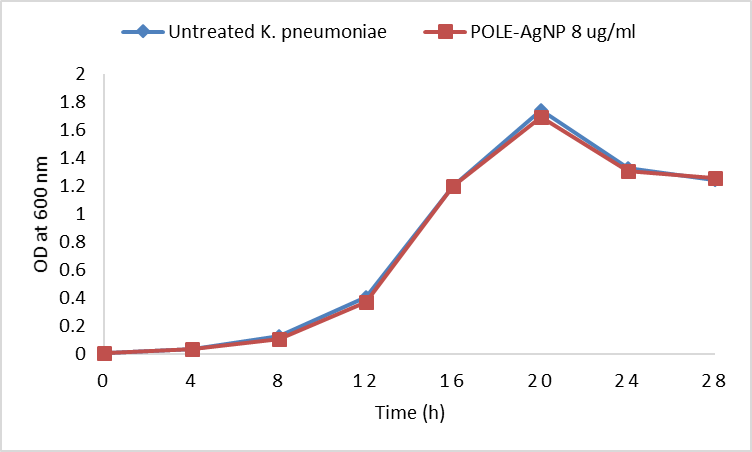
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameters** | **Rhl R** | **Z-Score (RhlR)** | **PqsA** | **Z-Score (PqsA)** |
| C-beta interaction energy | -80.62 | -0.59 | -116.17 | -0.96 |
| All-atom pairwise energy | -5745.15 | -0.39 | -10496.80 | -0.93 |
| Solvation energy | -30.28 | 0.62 | -41.49 | -0.38 |
| Torsion angle energy | -22.69 | -2.71 | -82.87 | -2.04 |
| Secondary structure agreement | 83.4% | 0.18 | 81.2% | 0.39 |
| Solvent accessibility agreement | 75.5% | -0.80 | 81.0% | -0.04 |
| Total QMEAN-score | 0.603 | -1.79 | 0.708 | -0.70 |

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**Fig. S1. UV-Vis absorption spectra of biogenic AgNPs after four months.**

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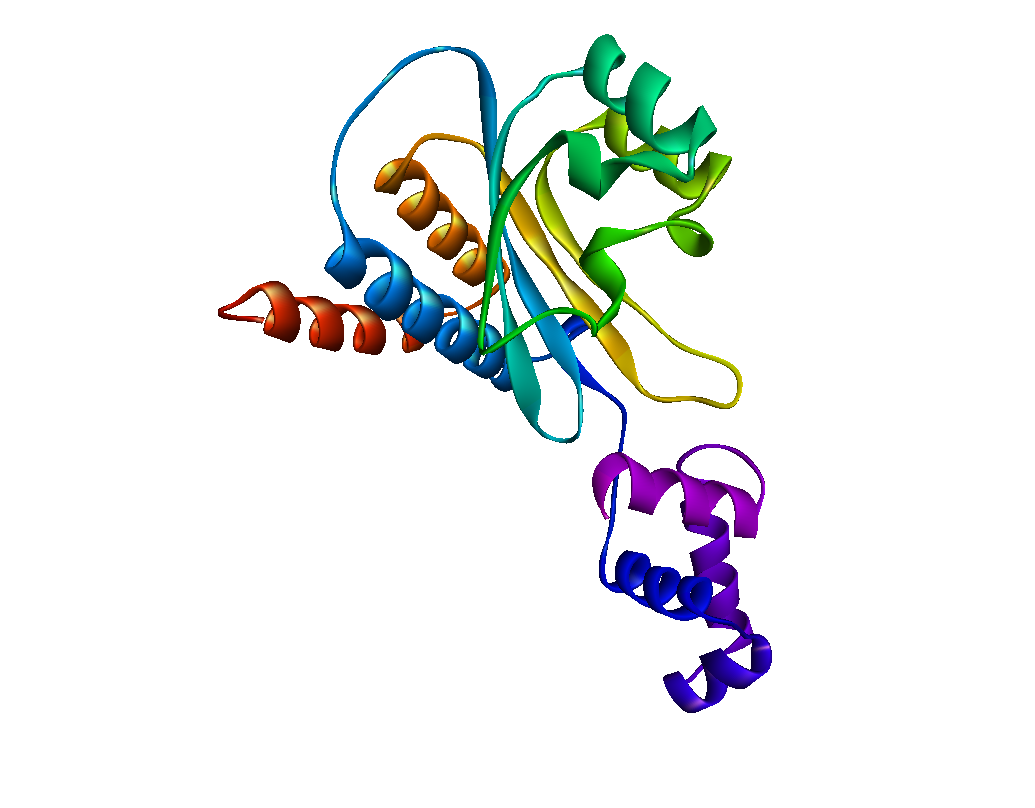
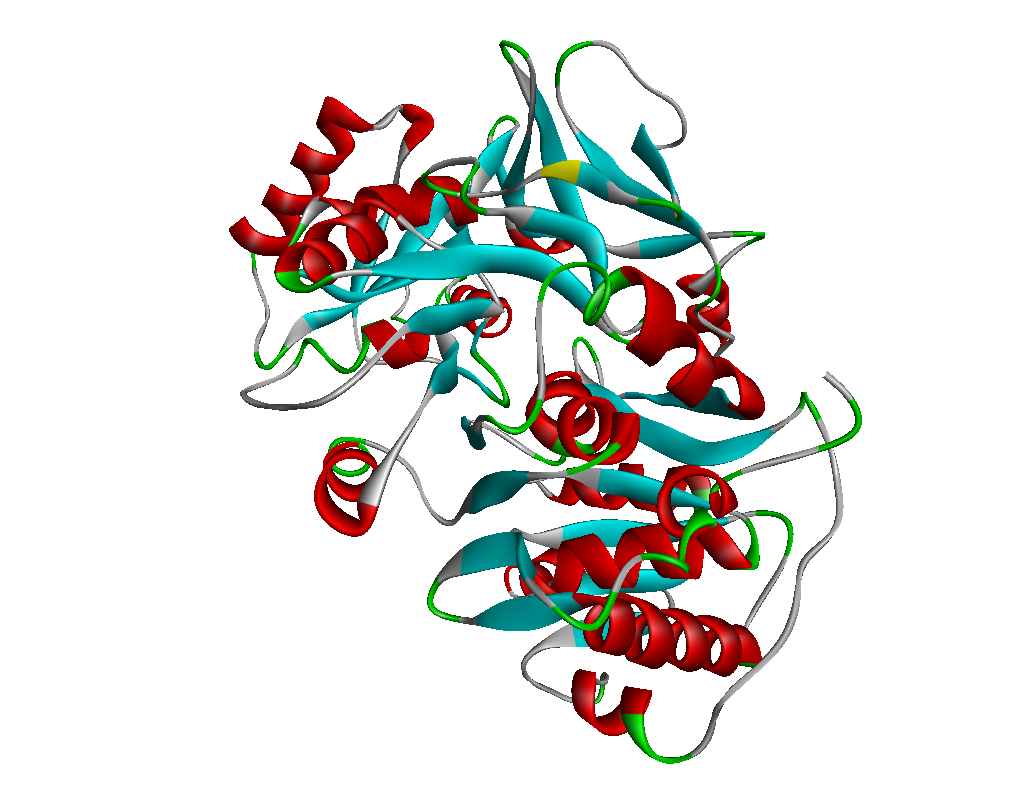
**Fig. S2. HRTEM images of biogenic AgNPs after four months.**



**Fig. S3. Growth curve analysis of test pathogens at respective ½ x MIC.**

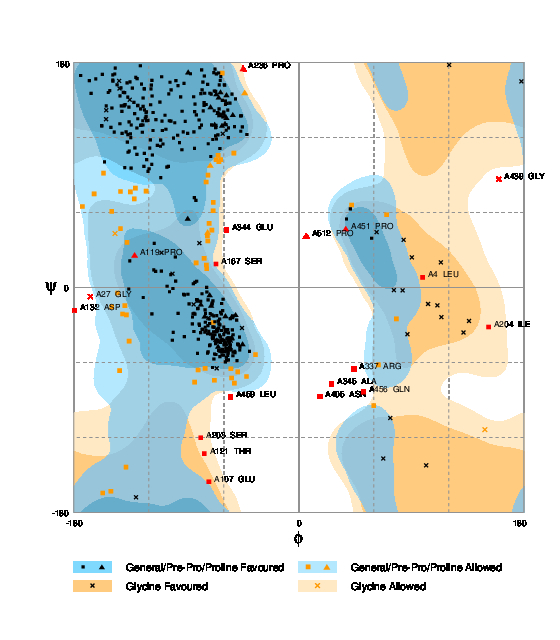
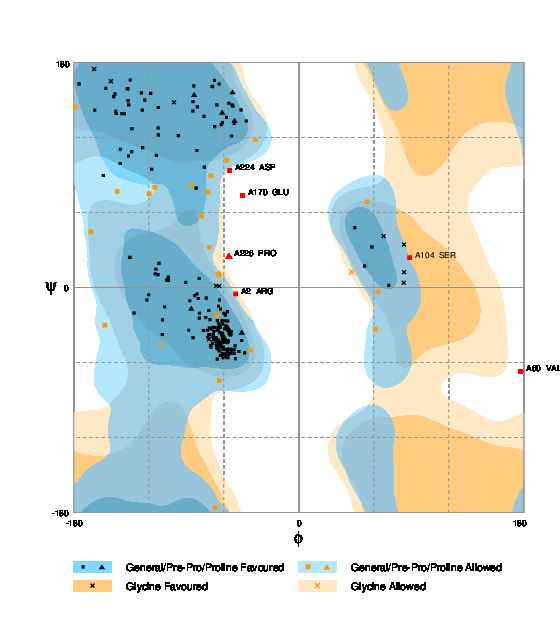
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**Fig. S4. Log CFU values of test pathogens at ½ x MICs.**

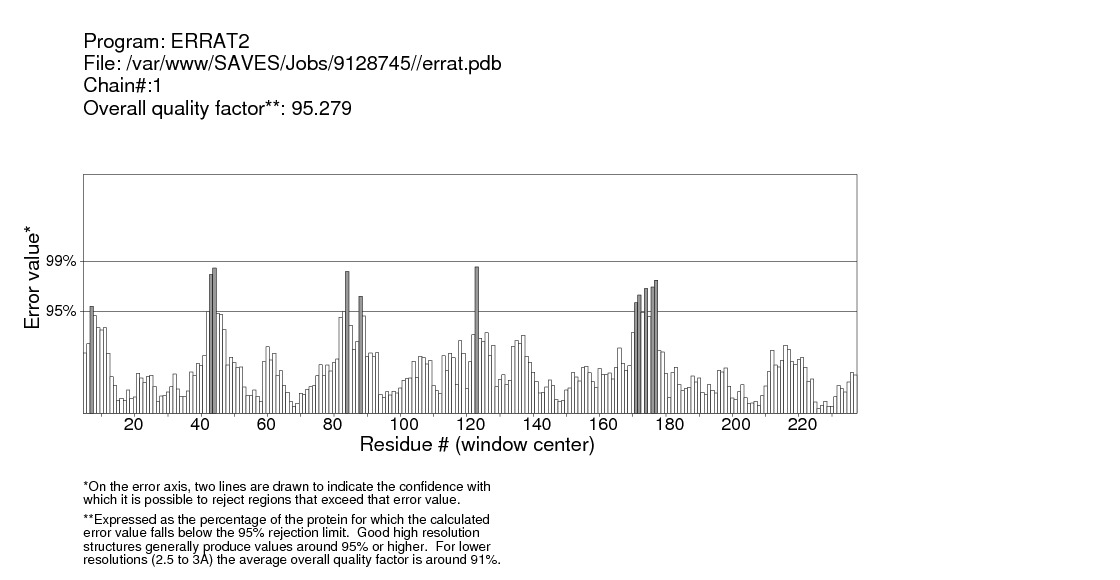
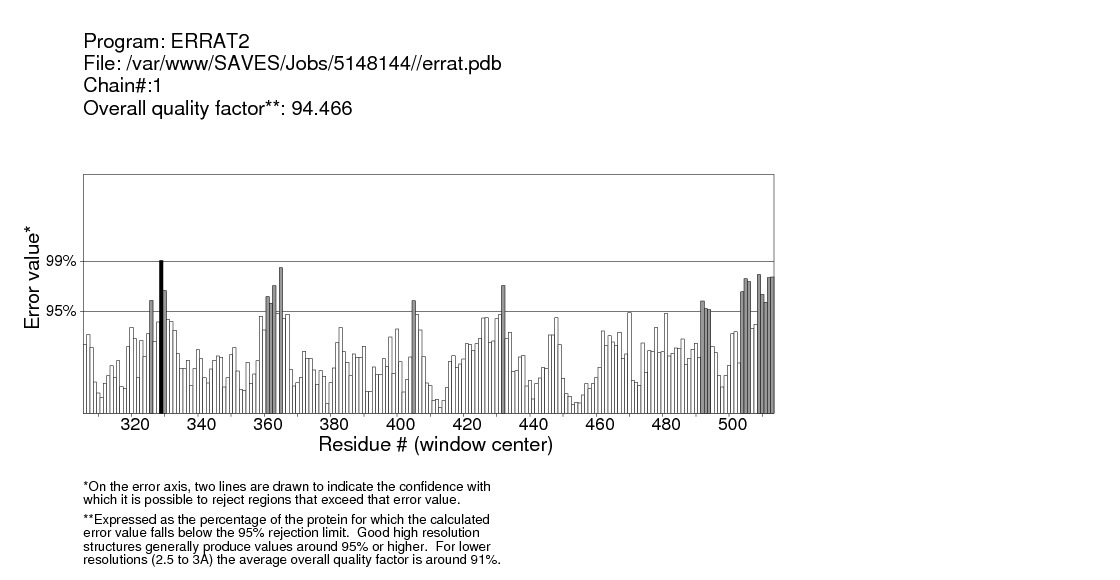
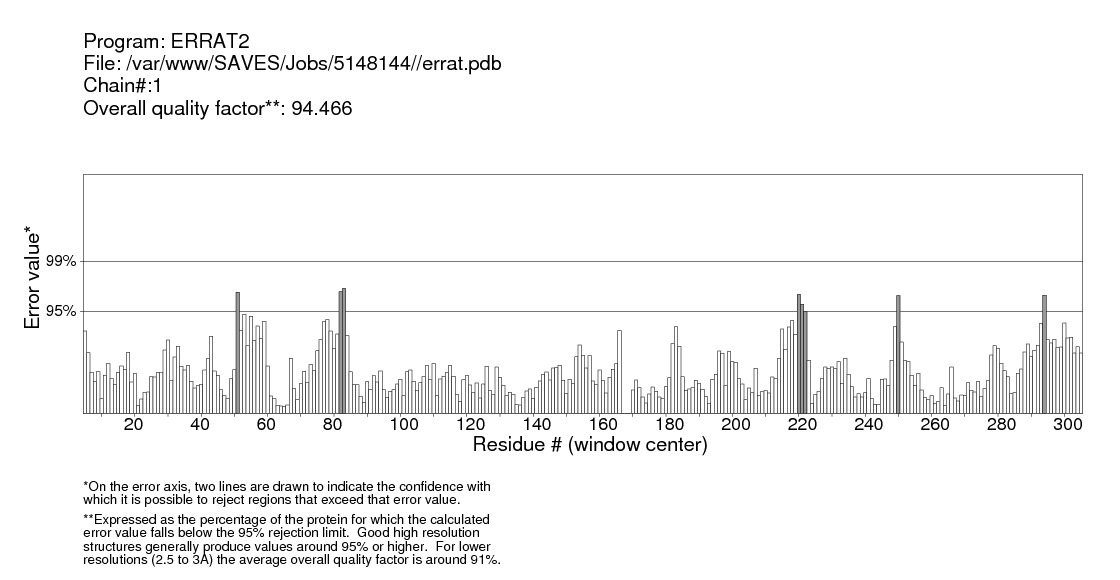
**(A) (B)**

**Fig. S5.** **Modeled three-dimensional structures of (A) RhlR and (B) PqsA**



1. **(B)**

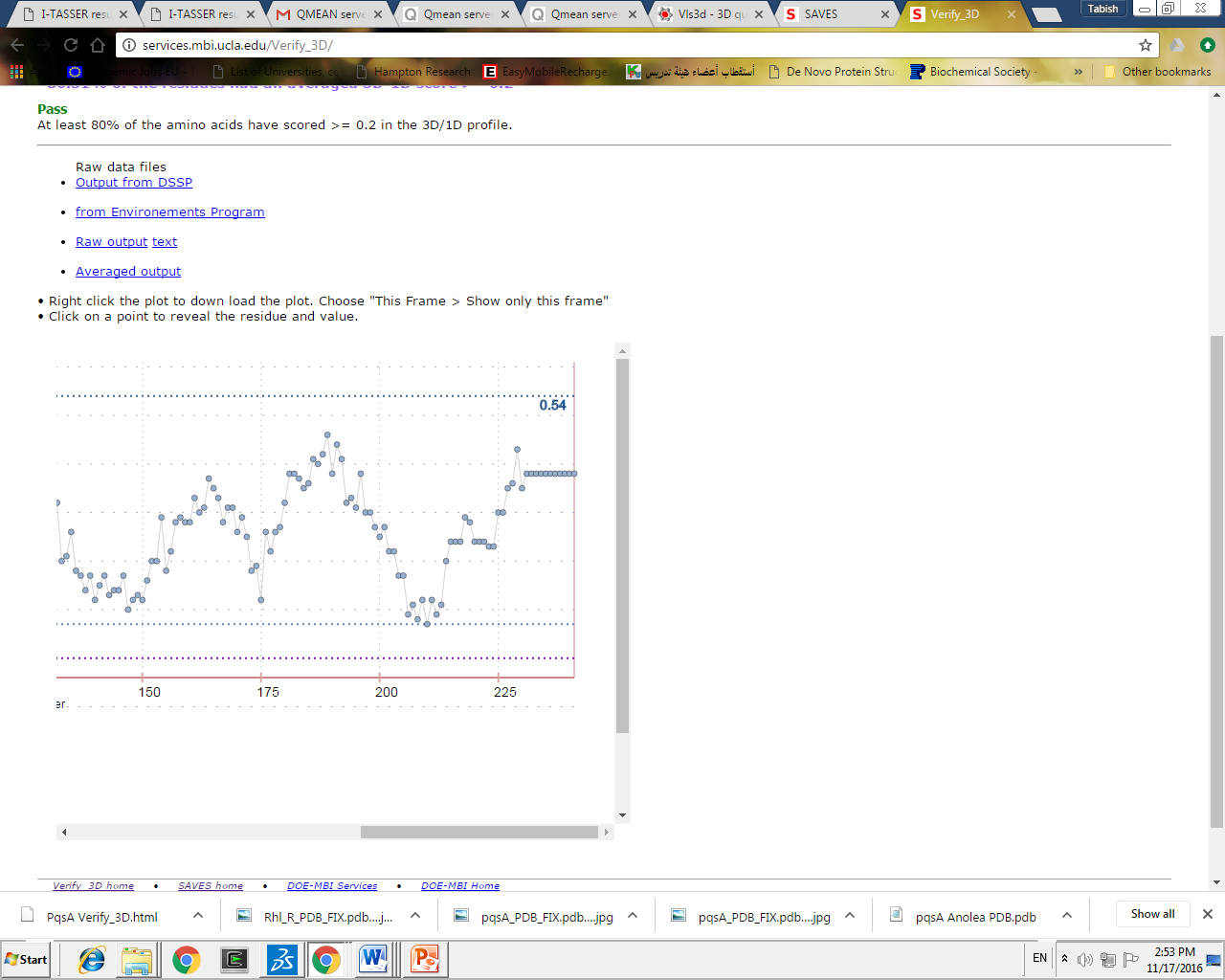
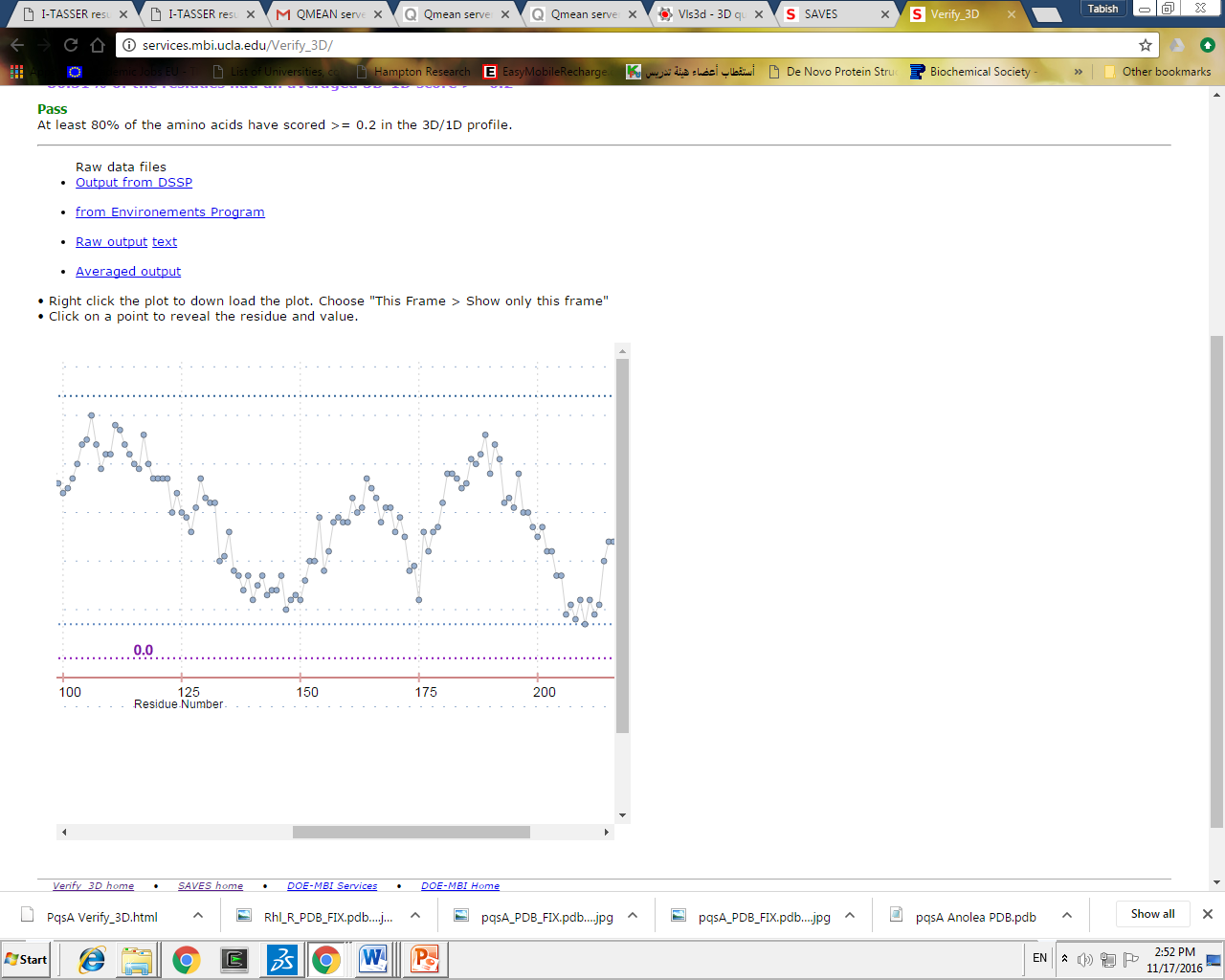
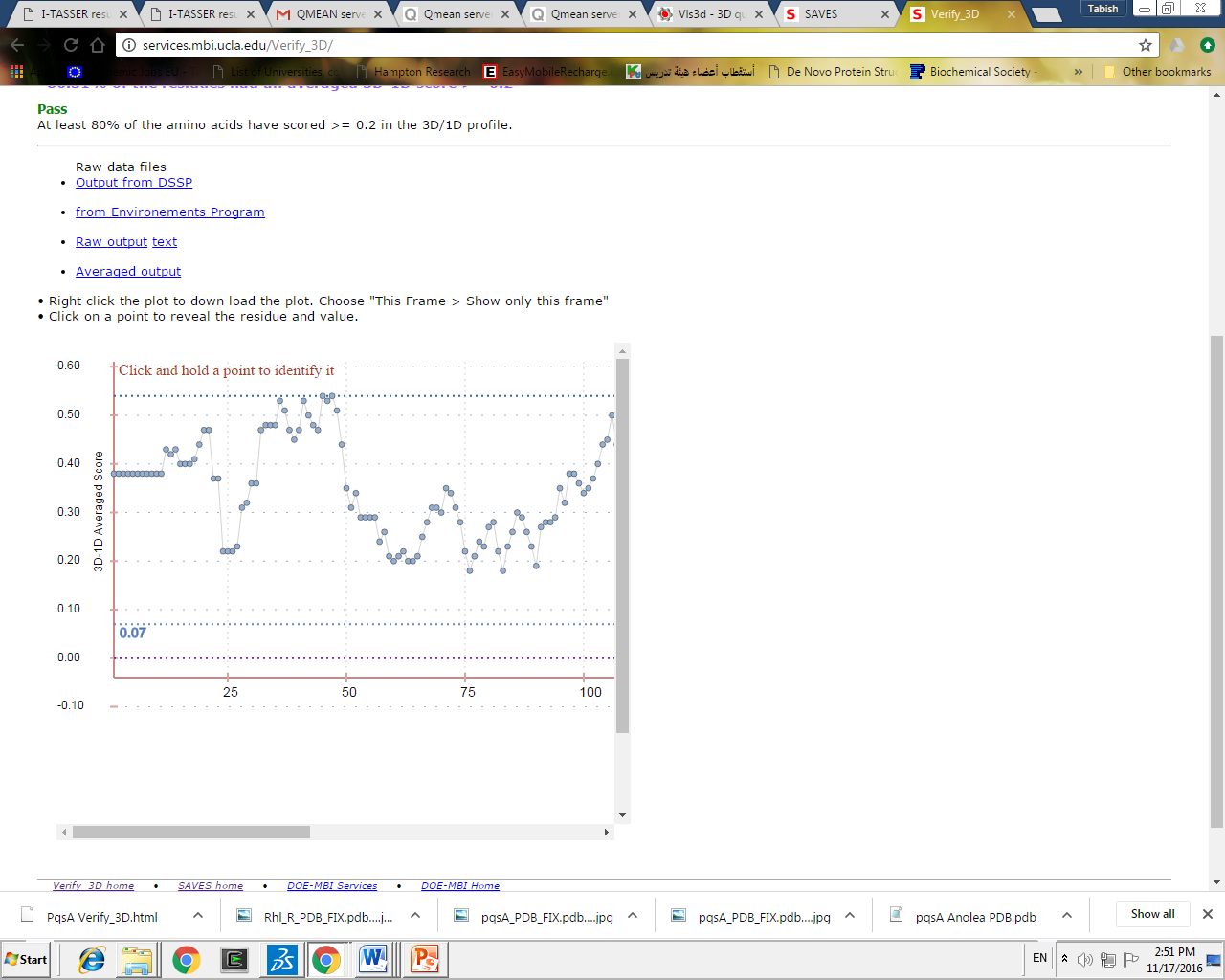
**Fig. S6. Ramachandran Plot of (A) RhlR and (B) PqsA**



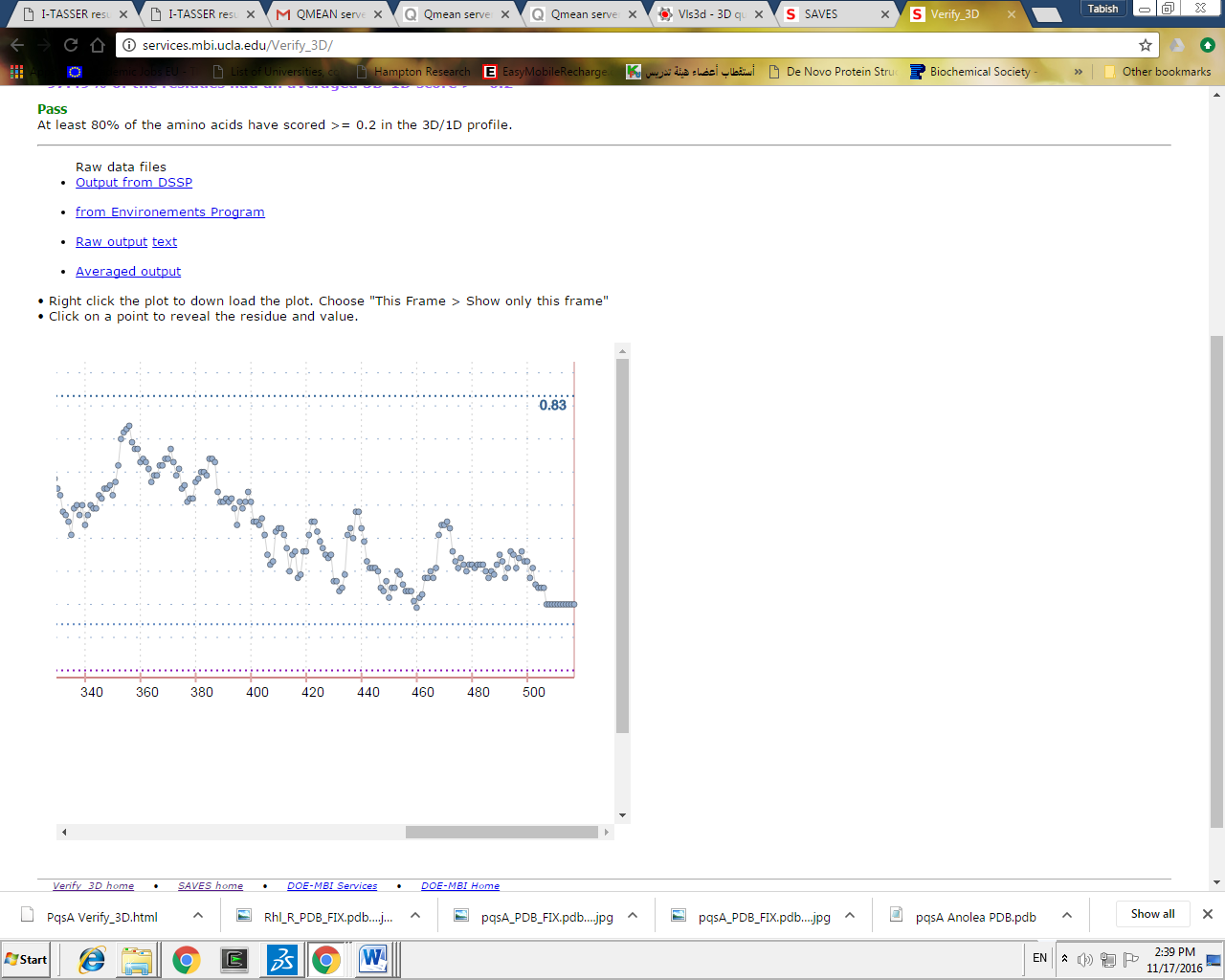
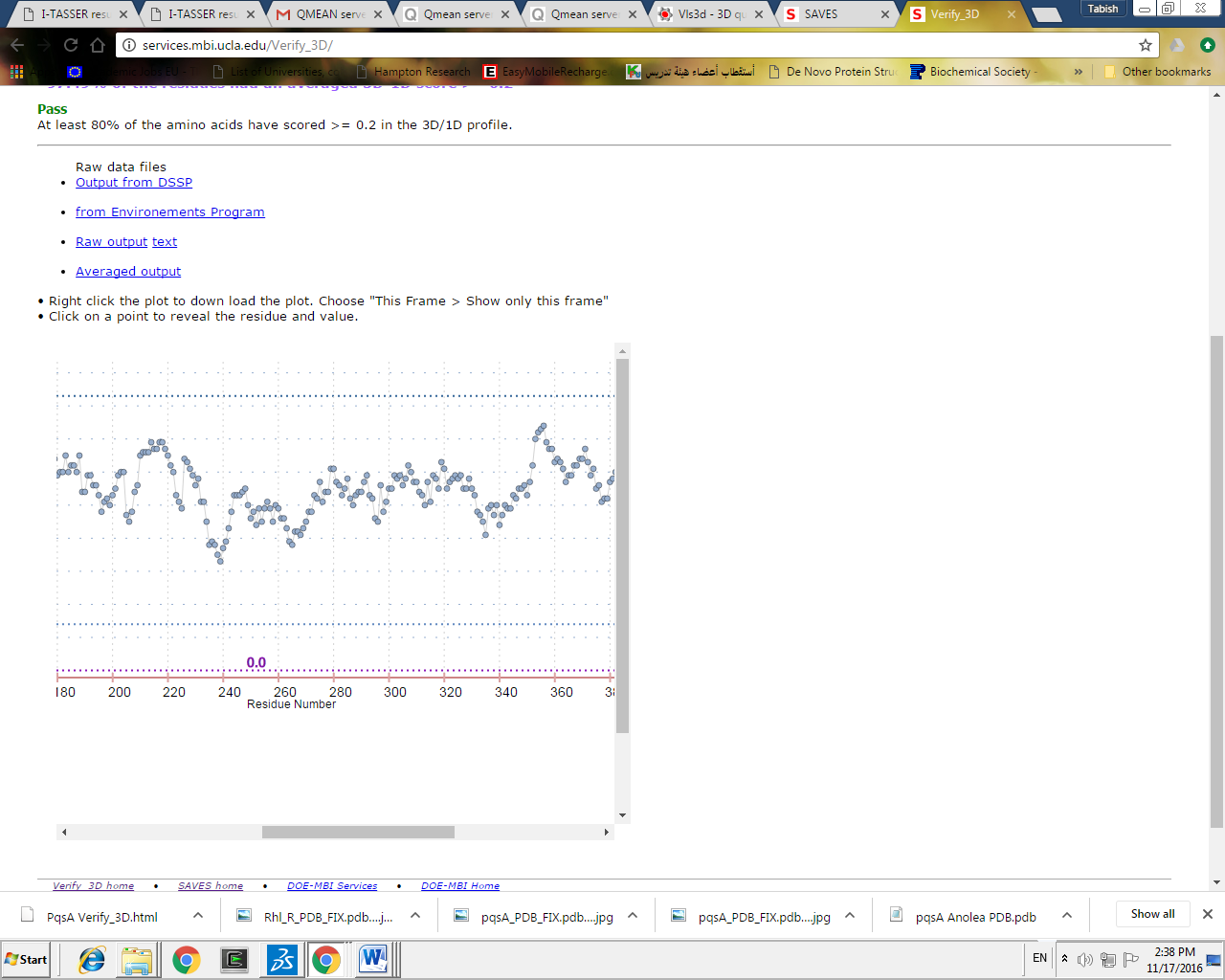
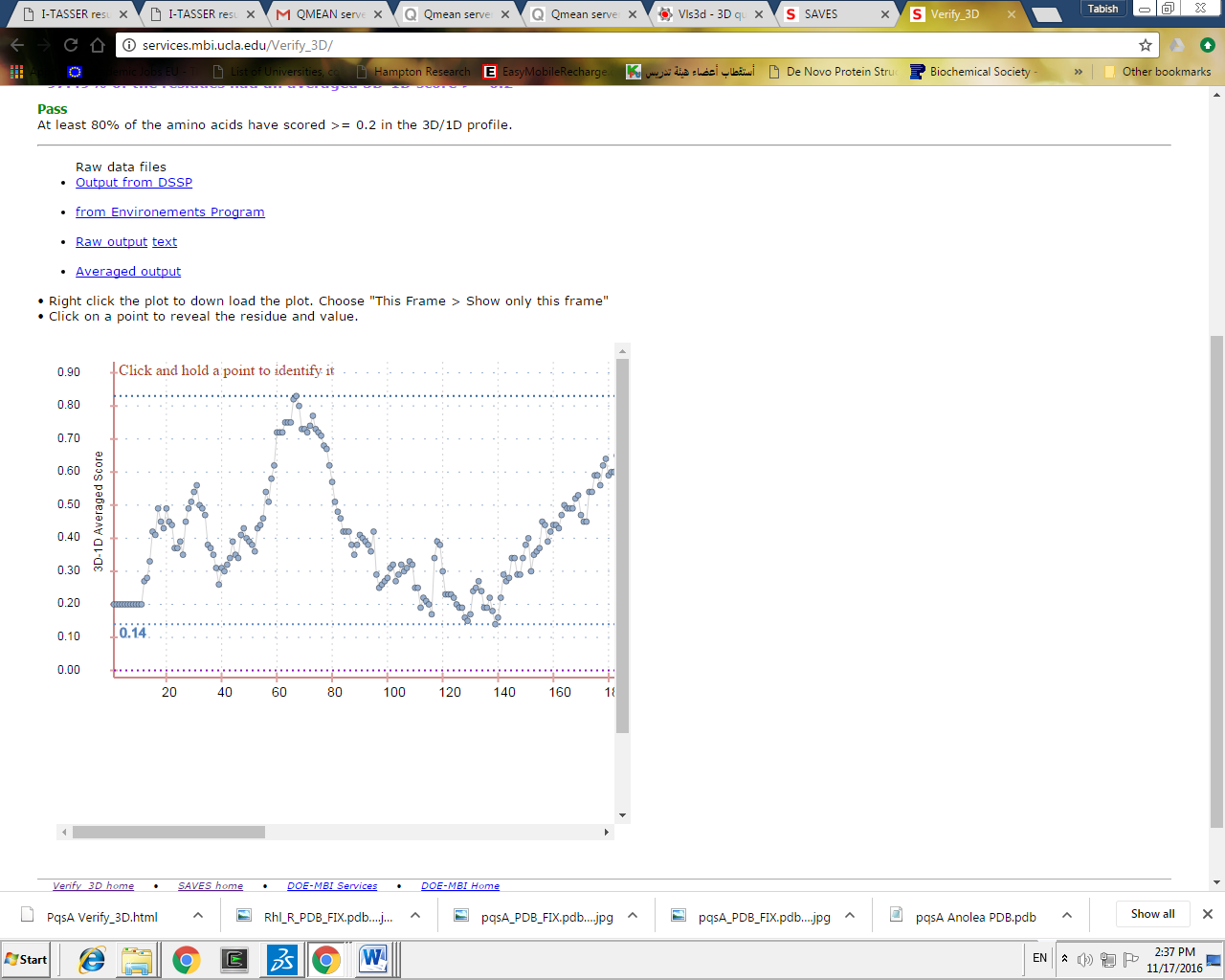
**(A)**

**(B)**

**Fig. S7. ERRAT plots of (A) RhlR and (B) PqsA**



**(A)**



**(B)**

**Fig. S8. Verify 3D plots of (A) RhlR and (B) PqsA**