**Supplemental Table 1. Web-based tools and software used in this study.** The following toolbox for structural analysis was created for this study.

| Server Name | Active link |
|---|---|
| Jalview | https://www.jalview.org/ |
| IQ-TREE Web Server | http://iqtree.cibiv.univie.ac.at/ |
| Protein BLAST | https://blast.ncbi.nlm.nih.gov/Blast.cgi |
| PSIPRED 4.0 | http://bioinf.cs.ucl.ac.uk/psipred/ |
| DISOPRED3 | http://bioinf.cs.ucl.ac.uk/psipred/ |
| ERRAT2 | https://saves.mbi.ucla.edu/ |
| Verify3D | https://saves.mbi.ucla.edu/ |
| PROCHECK | https://saves.mbi.ucla.edu/ |
| AlphaFold2 | https://colab.research.google.com/github/sokrypton/ColabFold/blob/main/AlphaFold2.ipynb |
| RoseTTAFold | https://robetta.bakerlab.org/ |
| DynaMine | https://bio2byte.be/dynamine/# |
| flDPnn | http://biomine.cs.vcu.edu/servers/flDPnn/ |
| MemprotMD | https://colab.research.google.com/github/pstansfeld/MemProtMD/blob/main/MemProtMD_Insane.ipynb |
| CABS-flex 2.0 | http://biocomp.chem.uw.edu.pl/CABSflex2 |
| UCSF ChimeraX | https://www.cgl.ucsf.edu/chimerax/ |
| ConSurf | https://consurf.tau.ac.il/ |
| PEBQ Solver | https://charmm-gui.org/ |
| ClusPro 2.0 | https://cluspro.bu.edu/ |