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In-silico analysis of 2A protease as a prophylactic and therapeutic target against Hand, Foot, and Mouth disease

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Supplementary Tables

Table 1 — Physicochemical parameters of EV - 71 $2A^{pro}$ analyzed by Protparam server

Molecular Weight	242657.25 Da
Pi	6.37
Half Life	
1. in mammalian reticulocytes	30 hours
2. Yeast	>20 hours
2.*E.coli*	>10 hours
Instability index	37.42
Aliphatic index	83.16 %
Hydrophobicity grand average	-0.199

Table 2 — Physicochemical parameters vaccine construct analysed by Protparam server

Molecular Weight	5937 Da
pI	8.52
Half Life	
1. in mammalian reticulocytes	1 hour
2. Yeast	30 min
2. *E.coli*	>10 hours
Instability index	18.86
Aliphatic index	68.39%
Hydrophobicity grand average	-0.37

Supplementary Figures

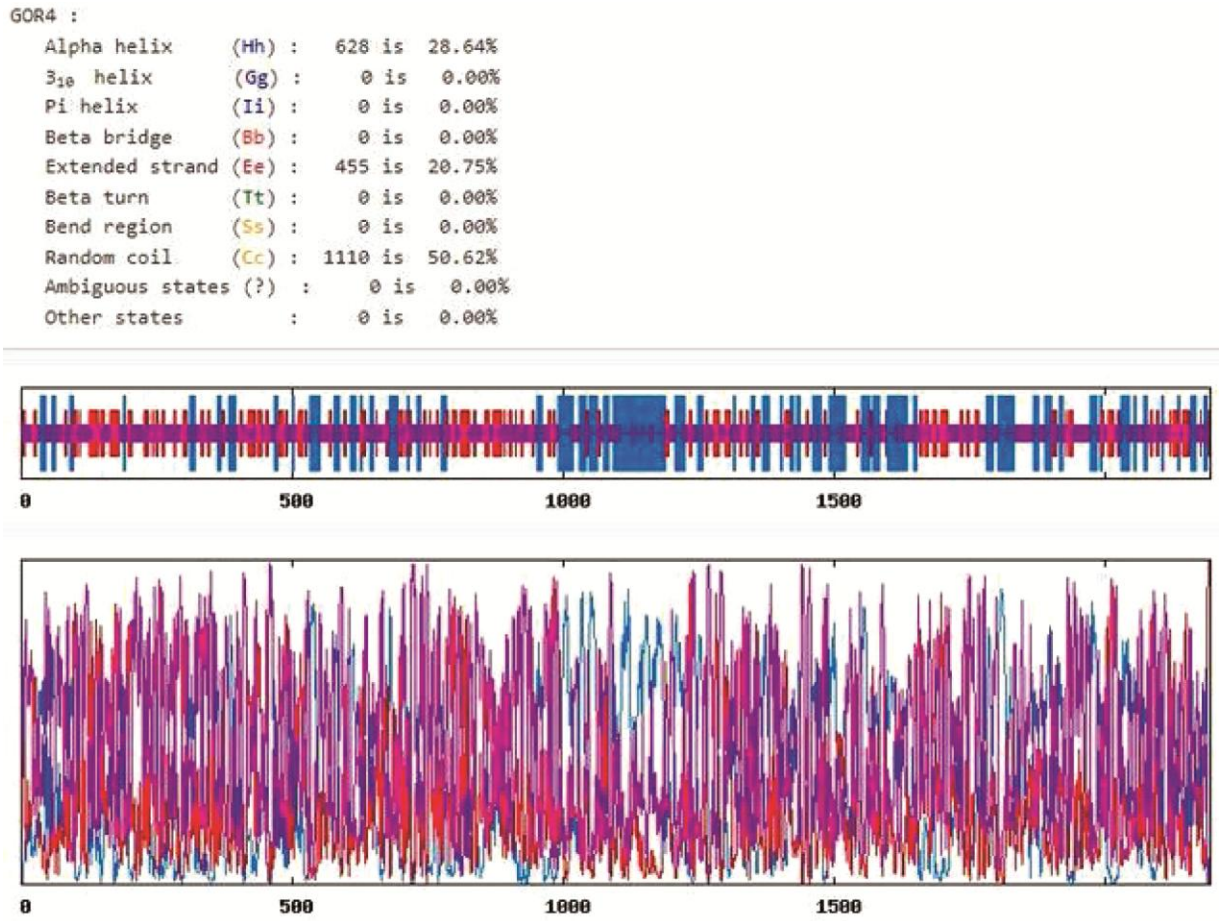

Fig. 1 — Secondary Structure of 2A polyprotein EV-71 using GOR IV server.

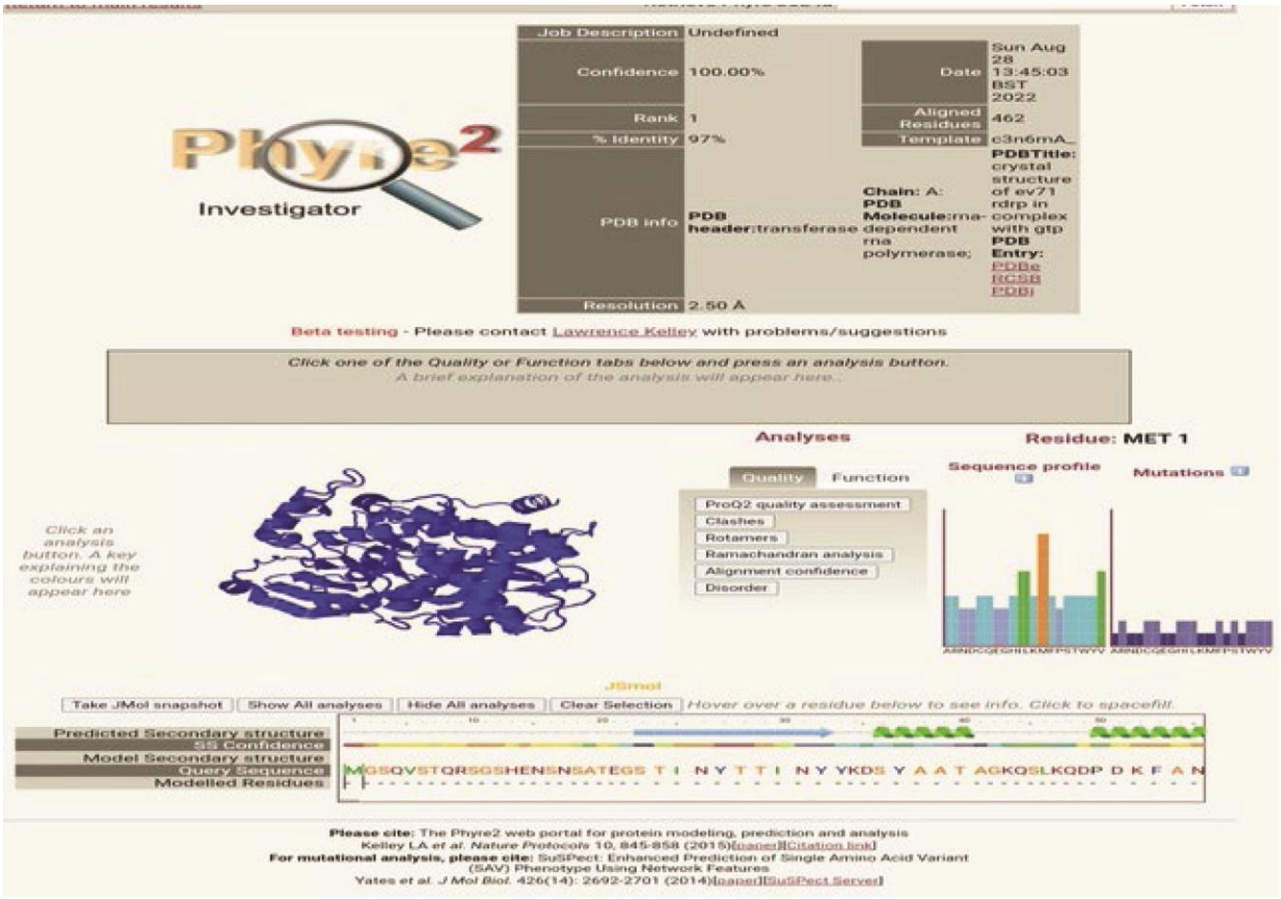

Fig. 2 — Tertiary structure prediction of 2A polyprotein EV-71 using Phyre tool.

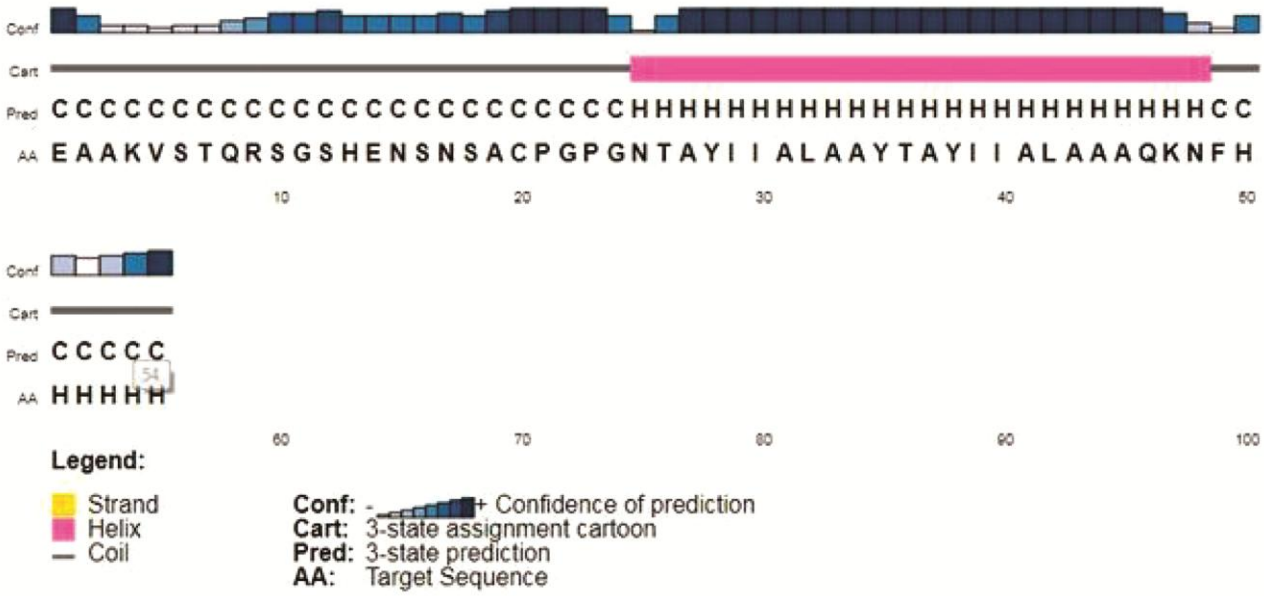

Fig. 3 — Secondary structure prediction of vaccine construct by using PSIPRED tool.

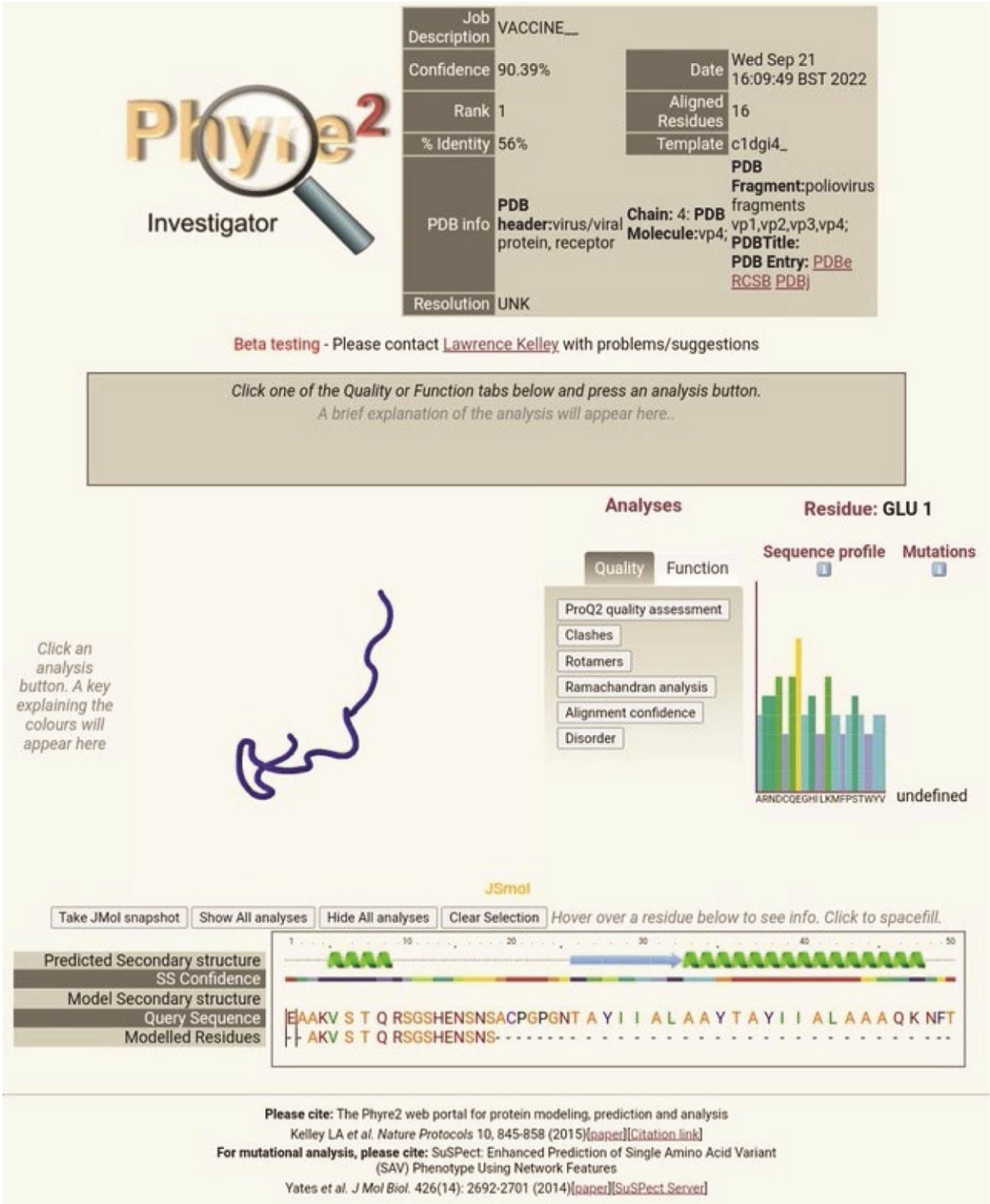

Fig. 4 — Tertiary structure prediction of vaccine construct by Phyreserver.