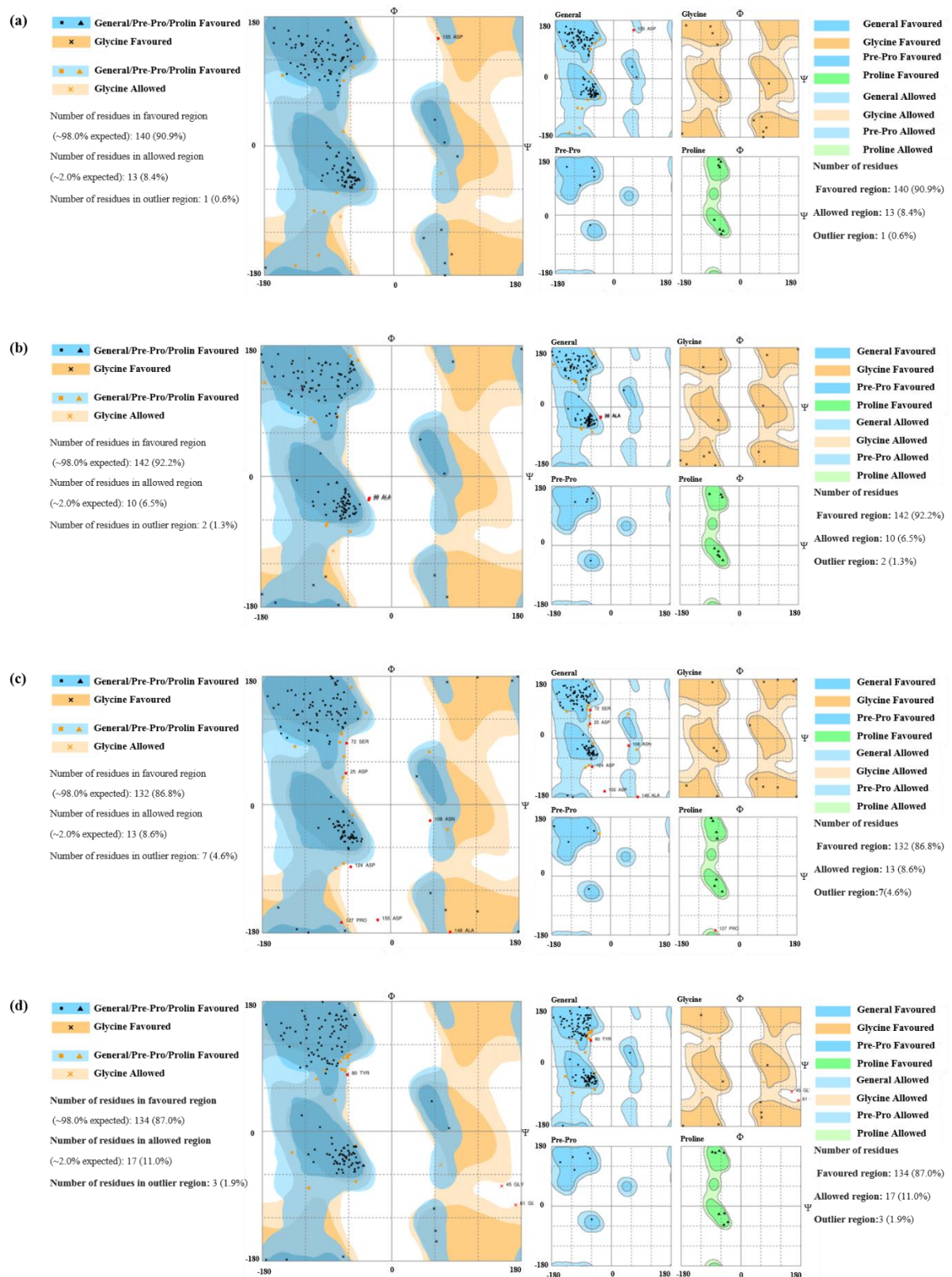
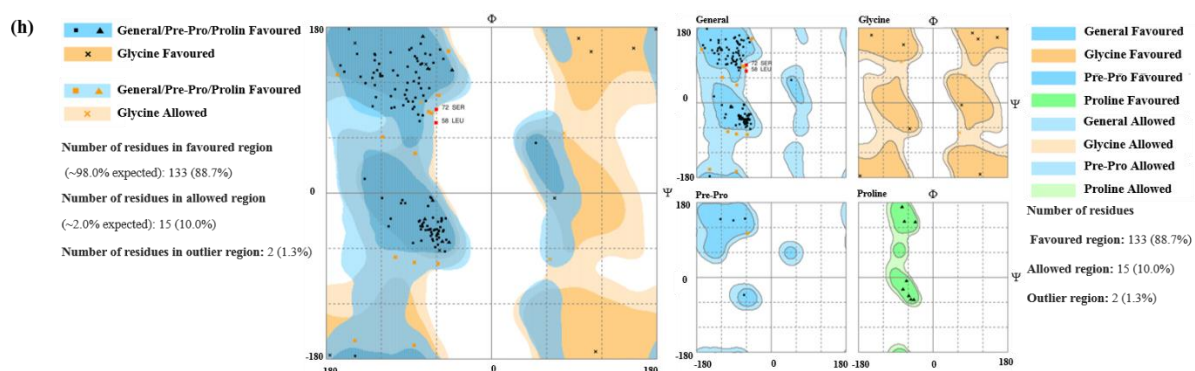
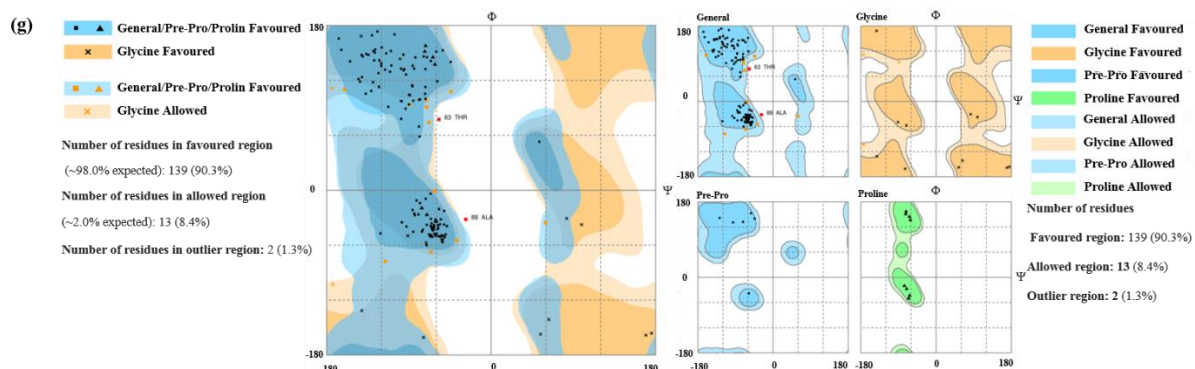
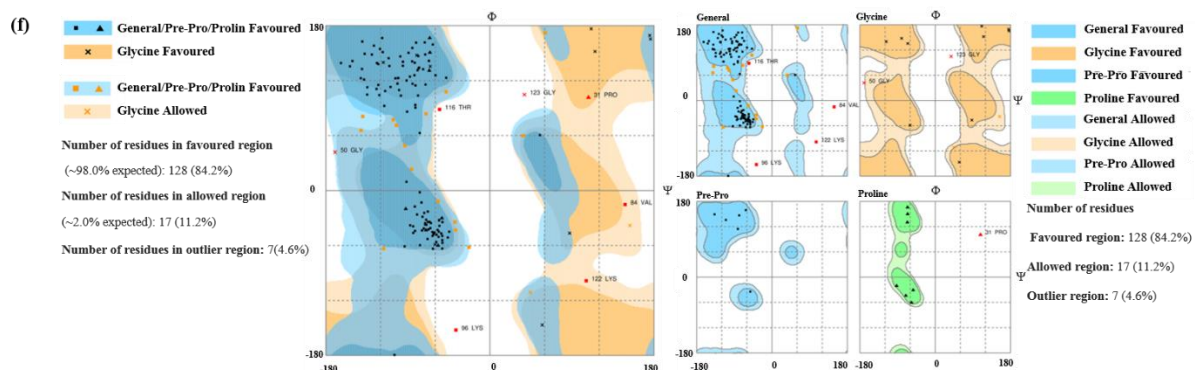
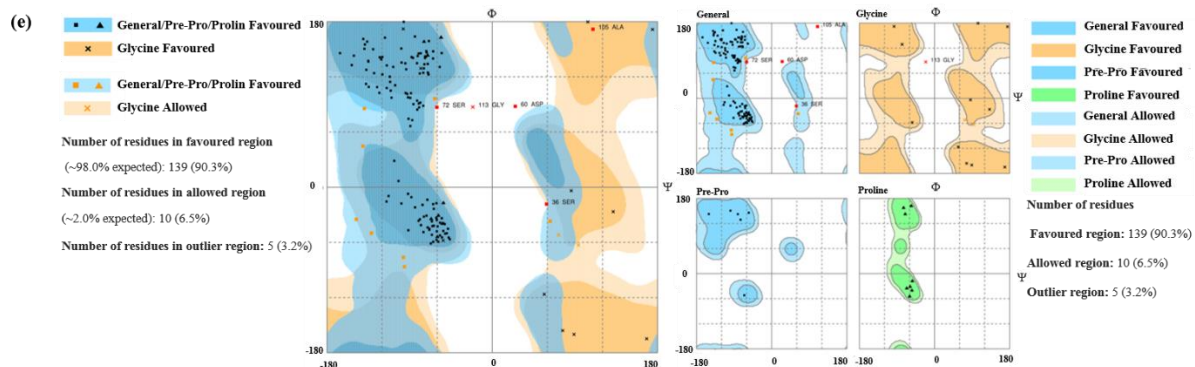


Supplementary Table 1. Changes in atomic properties of Gly m 4 allergen.

Temperature	Pressure	RMSD (nm)	Rg (nm)	SASA (nm²)
300 K	1 bar	0.254±0.03	1.543±0.011	88.27±2.21
	3 kbar	0.254±0.026	1.532±0.012	89.1±2.52
	6 kbar	0.252±0.035	1.539±0.009	89.32±2.14
345 K	1 bar	0.275±0.03	1.549±0.011	89.15±2.33
	3 kbar	0.285±0.036	1.524±0.01	84.78±1.83
	6 kbar	0.265±0.026	1.53±0.008	86.09±1.86
373 K	1 bar	0.324±0.039	1.547±0.015	89.07±2.4
	3 kbar	0.278±0.025	1.53±0.01	85.27±2.09
	6 kbar	0.257±0.037	1.52±0.016	85.42±2.71

Supplementary Figure 1. Ramachandran plot and integrated plot of Gly m 4 at different conditions: (a) 300 K, 1 bar; (b) 300 K, 3 kbar; (c) 345 K, 1 bar; (d) 345 K, 3 kbar; (e) 345 K, 6 kbar; (f) 373 K, 1 bar; (g) 373 K, 3 kbar; (h) 373 K, 6 kbar.





Supplementary Figure 2. Similar progression of Rg and SASA of Gly m 4 allergen at 300 K and 6 kbar.

