

Figure S1. Ramachandran plot for the predicted model of Der f 24 generated using PDBsum. Ramachandran plots and RMSD were used for structural assessment of the predicted 3D model of Der f 24. The red and brown regions represent the favored and allowed regions. These favored regions include the dihedral angles typical of the alpha-helical and beta-sheet conformations. Der f 24, group 24 allergen of *Dermatophagoides farinae*; RMSD, root mean square deviation.

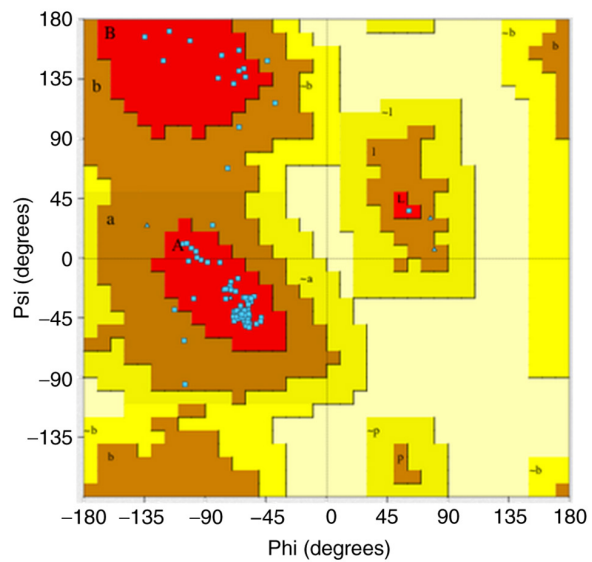


Figure S2. Homology modeling of Der f 24 using bovine cytochrome b-c1 complex subunit 7 as a template. Structural alignment of the predicted model of Der f 24 (green) with the template (blue). Der f 24, group 24 allergen of *Dermatophagoides farinae*.

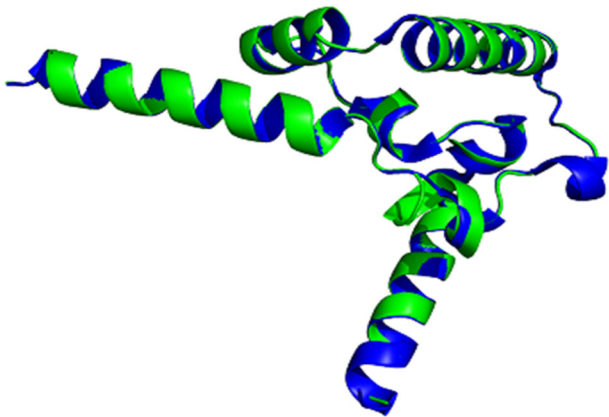


Figure S3. Structural models of the potential immunodominant IgE-binding region of Der f 24. (A) Schematic diagram of the Der f 24 model structure and the N-terminal 1-32 aa peptide region in red. (B) Stick diagram of residues Tyr-28 and Lys-29 of Der f 24. Der f 24, group 24 allergen of *Dermatophagoides farinae*; IgE, immunoglobulin E; Tyr, tyrosine; Lys, lysine.

