

Figure S1. $\alpha 5\beta 1$ integrin amino acid residues with potential for multiple interactions with *Pllans-II* amino acids (purple) and fibronectin amino acids (yellow).

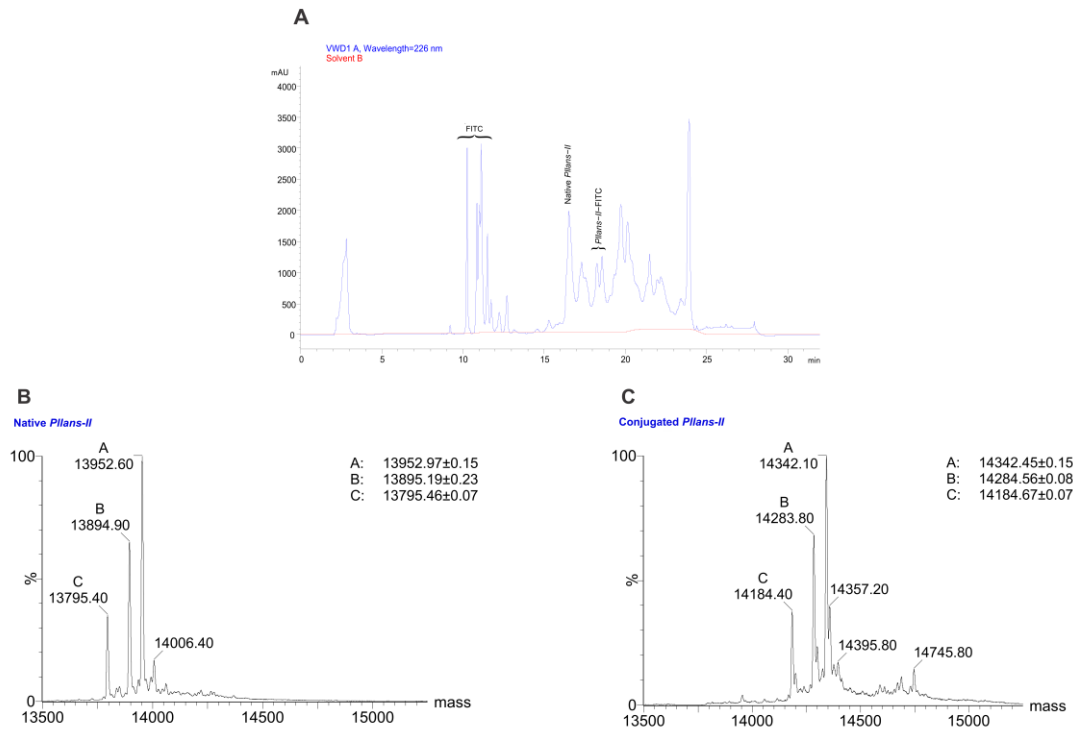


Figure S2: RP-HPLC and mass spectrometry analyses of *Pllans-II* conjugation with FITC. **(A)** RP-HPLC chromatographic profile of the FITC conjugation reaction. Peaks between retention times of 10 and 14 minutes correspond to FITC solution components. The peak with a retention time of 16.5 minutes corresponds to the *Pllans-II* protein that was not conjugated, while the peaks with a retention time between 18 and 18.6 minutes correspond to *Pllans-II* conjugated with FITC. **(B)** Mass spectrum of native *Pllans-II*, in which it is evident that the protein is present in three isoforms (A-C) that differ by 57 Da and 101 Da, respectively. **(C)** The mass spectrum of conjugated *Pllans-II* shows that the three isoforms differ from the native ones by approximately 389 Da, which is the mass of FITC.

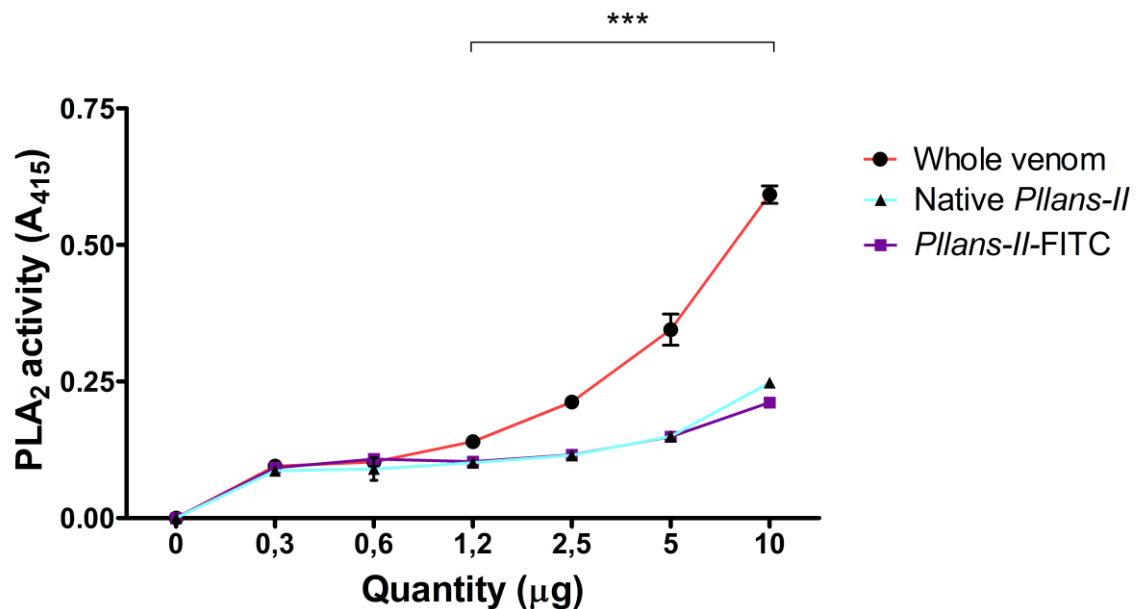


Figure S3. FITC-derivatized *Pllans-II* retains its enzymatic activity. Comparison of phospholipase A₂ activity of derivatized *Pllans-II* (*Pllans-II*-FITC, purple line), in contrast to native *Pllans-II* (light blue line) and complete venom (red line). The assay was carried out on NOBA monodisperse substrate. Data are expressed as mean \pm SD, and procedures were developed in triplicate. Statistically significant differences are observed with *** $p < 0.001$.

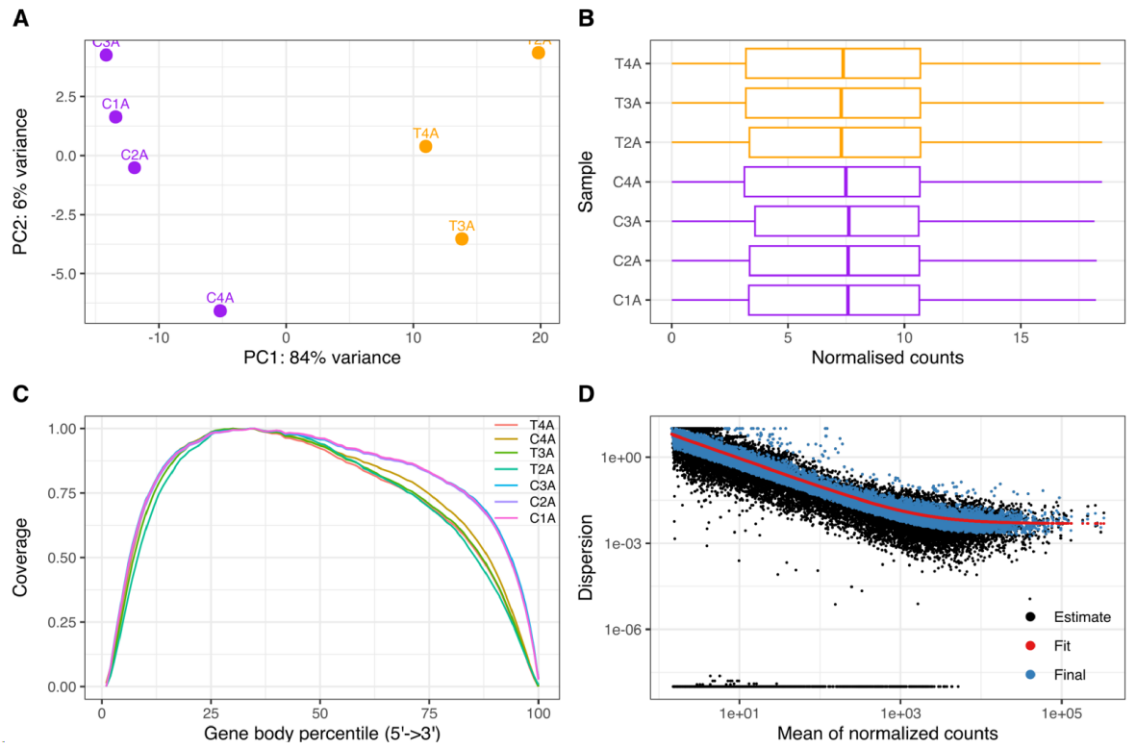


Figure S4. Quality control for transcriptomic analysis. **(A)** Principal component analysis (PCA). It is observed that the *Pllans-II* treatment explains 84% of the variation, while the intragroup variation represented 6%. The clustering pattern was as expected, and no potential outliers were observed for the samples. **(B)** Counting distributions. The normalized count distributions presented a similar gene expression profile, making them comparable for differential expression analysis. **(C)** Gene body coverage. A uniform distribution of the reads indicated the absence of sample degradation during sequencing. **(D)** Scatterplot and the mean of the normalized counts. The spread decreased as the mean of the normalized counts for each gene increased, indicating a good data set.